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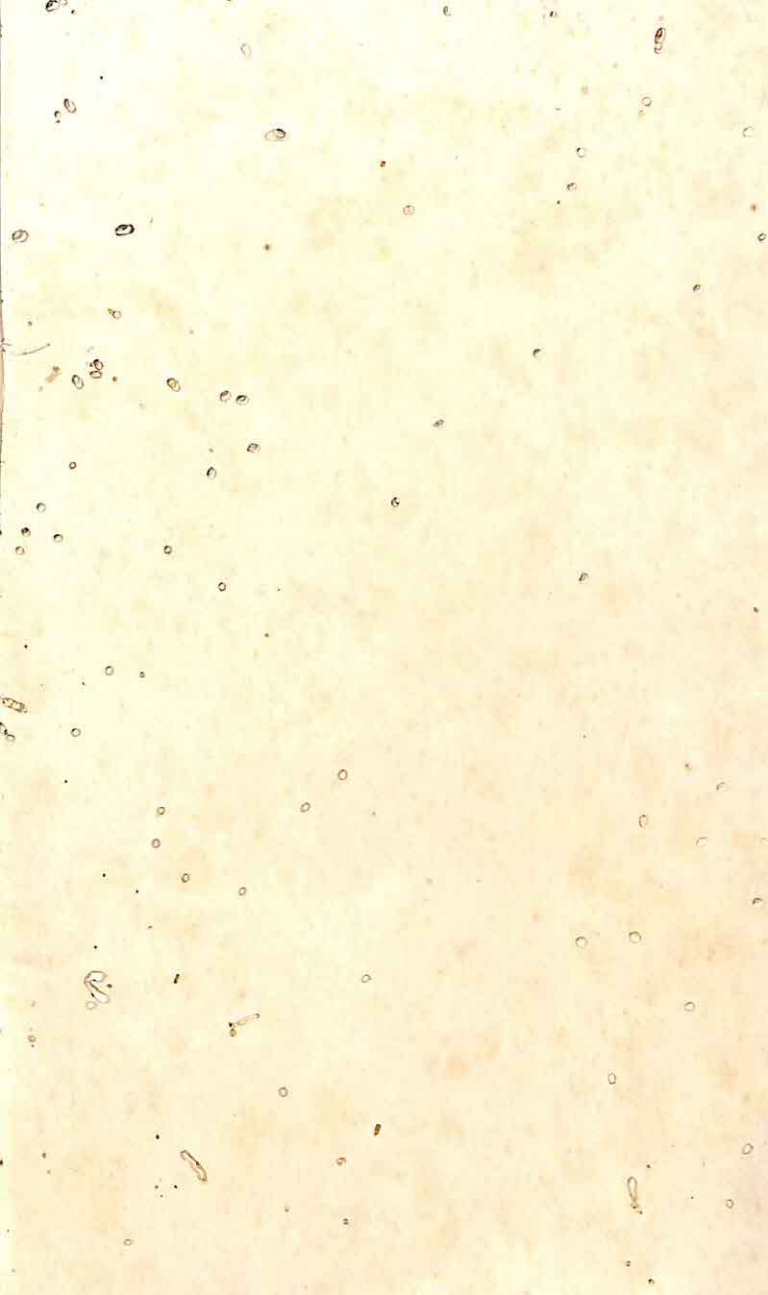
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A TEXT-BOOK
OF
NEEDLEWORK, KNITTING, AND
CUTTING OUT

WITH METHODS OF TEACHING



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A TEXT-BOOK
OF
NEEDLEWORK, KNITTING
AND
CUTTING OUT
WITH METHODS OF TEACHING

BY

ELIZABETH ROSEVEAR

LECTURER ON NEEDLEWORK AT THE TRAINING COLLEGE, STOCKWELL, LONDON, S.W. ;
AND AT MISS PRINCE-BROWNE'S STUDIO ;
EXAMINER TO THE LONDON HIGHER TECHNICAL EXAMINATION CENTRE

WITH ORIGINAL ILLUSTRATIONS, AND SECTIONAL DIAGRAMS

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TO THE
HON. MRS. EDMUND COLBORNE,
H.M. DIRECTRESS OF NEEDLEWORK
BY KIND PERMISSION,
THIS TEXT-BOOK
IS AFFECTIONATELY AND RESPECTFULLY DEDICATED
IN RECOGNITION OF HER WORTH AS
AN INSPECTRESS
AND OF HER UNFAILING COURTESY AND SYMPATHY,
BY THE AUTHOR



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PREFACE

TO THE FOURTH EDITION

THE Author, in order to insert some entirely new Cutting-Out diagrams, as well as fresh Notes of Lessons, has thoroughly revised the original text, and rearranged the Parts. By the abolition of a Needle-work Schedule, and annual examination tests, teachers are free to formulate schemes and to classify the children in accordance with their own plans. The Author has therefore substituted the word Class for the term Standard.

STOCKWELL, LONDON, S.W.,

1902.

PREFACE

TO THE FIRST EDITION

THE Author has been encouraged to hope, by many kind friends, that in publishing this Text-Book for the class teaching of Needlework, Cutting Out, and Knitting, she is rendering an important service to teachers in Public Elementary, High, Technical, and Evening Continuation Schools, Pupil and Student Teachers. The lessons have been practically worked out by the Author. Full details are given, not with the intention to cripple originality of plan and method, and so produce *hard-and-fast* teaching, but to stimulate young and inexperienced teachers to prepare their Needlework lessons with thought and purpose, with care and intelligence. The book is also intended for the use of mothers of families, and ladies engaged in parochial and mission work.

"The use of sewing is exceeding old,

As in the Sacred Text it is enrol'd.

Till the world be quite dissolu'd and past,
So long at least the needle's use shall last.

A needle (though it be but small and slender)
Yet it is both a maker and a mender ;
A graue Reformer of old Rents decay'd,
Stops holes and seames and desperate cuts display'd.

The Praise of the Needle, JOHN TAYLOR, 1640.

STOCKWELL TRAINING COLLEGE,
LONDON, S.W., 1893.

PREFACE

TO THE SECOND EDITION

IN preparing for the press a Second Edition of this Text-Book, the Author has tried to make it still more worthy of the cordial praise with which it has been received at Home, in our Colonies, and in America, by carefully revising, correcting, and adding new lessons and diagrams.

STOCKWELL TRAINING COLLEGE,
LONDON, S.W., 1894.

PREFACE

TO THE THIRD EDITION

THE rapid sale of the Second Edition of this Text-Book has given the Author another opportunity for careful revision, and of gratefully acknowledging the very favourable reception which the book has experienced from teachers, the press, and the public in general.

ELIZABETH ROSEVEAR.

STOCKWELL TRAINING COLLEGE,
LONDON, S.W., *October* 1894.

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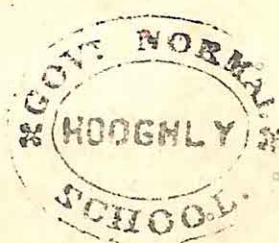
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INTRODUCTION

NEEDLEWORK is one of the useful arts, and as a branch of instruction may be made the means of training the hand and the eye. Robert Mudie says: "Of all the human powers, the hand is that, perhaps, which admits of the most cultivation, because its education is twofold; it may be educated in knowing and educated in doing. . . . We absolutely have a mine of wealth in those ten fingers, which the longest life cannot exhaust. We multiply it in the same proportion as we use it, and the hand which can do the most is the readiest in the performance of anything new." By practice in needlework the hand becomes steady, dexterous, and powerful. But the eye must also be trained to observe correctly, to compare sizes and forms, and to measure spaces, in order that the worker may fix evenly, sew regularly, draw and cut out accurately, and construct properly and tastefully.

• Cutting-out, as a branch of knowledge in connection with needlework, may be made the means of developing some of the intellectual faculties, for, in order to cut out well, it is necessary to think, to plan, to contrive, and to be accurate. When mathematical calculations, exact measurements, true proportions, and correct diagrams are employed, cutting-out ranks as a science. Looking at

needlework, then, as an art and the study of it as a science, it becomes a technical subject of instruction for girls. Needlework lessons to older girls should give an insight into principles implied in such industries as outfitting, baby-linen, dressmaking and millinery, so that the girls may afterwards work more freely and intelligently. Workers who have been from girlhood and boyhood scientifically trained are, as a rule, incomparably more efficient, when they enter the workroom, workshop, or factory, than those who are apprenticed to the same trade without the advantages of any previous training, and without any intelligent interest in the work they are called upon to do. Needlework as a leading branch of good housewifery cannot be too highly prized, nor the taste for it too generally cultivated. The careful, ingenious thought carried into execution by active, skilful fingers must materially improve the comfort and appearance of a family. When needlework is wisely taught it develops the thrifty disposition, encourages habits of neatness, cleanliness, order, management, and industry; and may truly be considered a moral and refining influence, both in the home and in the school. Patching, darning, knitting, and home-made garments are all ways and means of economising. Needlework differs from all other school subjects in that it can be made self-paying.

Sewing and knitting machines cannot be disregarded, because they are in more general use than they were a few years ago. Sewing machines are really necessary in making up some articles of wearing apparel; but, though they are often employed for constructing under-clothing, hand-made garments are still in great request, and always command the highest price in the market. Even when machines are used, the cutting-out and fixing of the

garments must be done by hand. Cheap sewing machines produce stitches which give way almost directly the garment is worn, and the machine needles often make unsightly holes in the material.

Good sewing machines should be introduced into evening continuation schools, and classes for older scholars in public elementary day schools, and the girls should be taught how to use them in making up children's frocks and overalls, and the dress bodices and skirts which they have previously cut out. A few words are necessary in regard to the kind of practice material which should be given to very young children and beginners. Coarse canvas, calico, flannel, stocking-web, and knitting materials should be supplied at first; and when the workers have made good progress they should be allowed to deal with materials such as would be generally used for garments in their own and in better-class homes. Pupil and student teachers' needlework ought to excel children's in perfection of shape, and in neatness and finish.

The lessons in this Text Book are all illustrated step by step from the object, and the diagrams are intended as guides and suggestions to teachers. It is of course impossible in a work of this character to give diagrams of garments of every variety of size that may be worn. The object has been to supply enough diagrams to illustrate the text, and to indicate the main lines upon which the different garments should be cut out; while the scales of proportion will, in the hands of intelligent readers, be ample to adapt the diagrams to any size that may be needed. The drawing of rough diagrams on the blackboard to illustrate the difficult and important points in a needlework lesson is absolutely indispensable. The teacher who can, in a few vigorous strokes on the slate, make her demonstrations

clearer, possesses an immense power of arousing and enchainning her pupils' interest, and of stimulating them to industrious and successful efforts. Needlework lessons can be so given as to train the powers of observation, comparison; contrast, and reason; and to develop a taste for the beautiful. Everything undertaken must be finished off completely and perfectly; and girls, in these days of slipshod productions, ought to be trained to recognise that only work which can bear the test of thorough inspection, inside as well as outside, deserves commendation.

Nathaniel Hawthorne has written the following:—
“There is something extremely pleasant and even touching—at least, of very sweet, soft, and winning effect—in this peculiarity of needlework distinguishing women from men. Our own sex is incapable of any such byplay aside from the main business of life; but women—be they of what earthly rank they may, however gifted with intellect or genius—have always some handiwork ready to fill the tiny gap of every vacant moment. A needle is familiar to the fingers of them all. A queen, no doubt, plies it on occasion; the woman-poet can use it as adroitly as her pen; the woman's eye that has discovered a new star turns from its glory to send the polished little instrument gleaming along the hem of her kerchief, or to darn a casual fray in her dress! And they have greatly the advantage of us in this respect. The slender thread of silk or cotton keeps them united with the small, familiar, gentle interests of life, the continually operating influence of which do so much for the health of character, and carry off what would otherwise be a dangerous accumulation of morbid sensibility. A vast deal of human sympathy runs along the electric line, stretching from the throne to the wicker chair of the humblest seamstress, and keeping high and low

in a species of communion with their kindred beings. Methinks it is a token of healthy and gentle characteristics, when women of high thoughts and accomplishments love to sew; especially as they are never more at home with their own hearts than while so occupied."



PART I

INFANT AND GIRLS' SCHOOLS
NEEDLEWORK



CHAPTER I

VARIED OCCUPATIONS.—*Needlework Implements, e.g.
Scissors, Bodkin, Stiletto, Inch-Measure*

DRILLS.—*Needle, Thimble, Needlework*

VARIED OCCUPATIONS

THE SCISSORS

ALL children are naturally destructive, and, even when they are not positively mischievous, they like to handle a pair of scissors, or a penknife, to cut up material. The first sign of this destructive propensity is shown in using the scissors to cut off their own, or their playmates' hair, and in injuring their clothes, or any furniture that comes within their reach. The mother and teacher can train this destructive power to useful ends and purposes by teaching children how to cut paper, which has been previously folded, in straight lines. These paper strips can be used afterwards to represent tape-strings for threading the eye of a bodkin.

Class.—Infants from 5 to 7 years old.

Apparatus.—*For the Teacher and Children.*—At first, pairs of scissors with both blades rounded; and, in later

lessons, pairs of scissors with one blade pointed, and the other rounded; squares of soft white or coloured paper.

Method.—1. *How to hold the Scissors.*—(a) Show the children how to place the right thumb in one of the *bows* or *handles* (the one belonging to the pointed blade, if this kind of scissors is used), and the second and third fingers in the other *bow*, putting the first finger under the shank of the scissors to act as a guide while cutting out; (b) prove that the rounded edges of the blades will not cut anything; (c) show that the *pointed* blade will make a hole in material, and that it is used when we want to separate material that is double, so as to cut one piece only; (d) explain that as this point will pierce material, we keep the pointed blade *uppermost* when cutting out a long stroke.

2. *How to use the Scissors.*—(a) Show the children how to fold the square of paper into halves each way, twice, thus dividing the whole surface into sixteen squares (the children will know how to do this, if they have been taught on the lines of the Kindergarten system); (b) teach the children how to cut the paper along a crease by *one* action of the blades, and to the extent of the intersecting lines which form the squares; (c) explain why they must cut in long, bold strokes, viz. to prevent jagged, or saw-like edges; (d) recapitulate, by cutting each crease in the same way, till the sixteen squares are separated; (e) refold the squares into halves, then into quarters, then into eighths, and show children again how to cut along each crease to get straight strips of a certain width.

3. The next step would be to cut oblique lines, and a square of paper should be the material to operate upon. When the children can divide a square diagonally, they

should be taught how to cut curves—the diagonal lines acting as guides.

4. Small squares of waste calico or flannel from the needlework basket should be given to the children to test their skill and progress in cutting the simpler lines.

5. Explain that the word *Scissors* means “to divide, to cut.”

THE BODKIN

Class.—The same as above.

Apparatus.—*For the Teacher and Children.*—Steel, bone (or wood, *Sloyd* made) bodkins; strips of paper, or tape.

Method.—1. (a) Point out the various parts of the bodkin, and show the uses of them: viz. *the sharp point* must be used to separate the double material of a hem; *the small hole* must be used, like the eye of a needle, to carry cotton, or silk, or fine bobbin, or narrow ribbons; *the long slit or eye* must be used to carry tape, or ribbon, or velvet; *the rounded knob* at the end must be used in pushing the bodkin through a hole in the hem, or holes in lace.

2. Explain the meaning of the word bodkin,—“*a small sword*,”—and illustrate its appearance on the slate.

3. Show children how to thread the small eye with coarse crochet cotton or fine twine, using the same drill as for a sewing needle.

4. Explain that the long slit or eye is most generally used: (a) give out strips of white or coloured paper (firm, but not stiff and hard); (b) show how to take up the bodkin in the left hand, like a sewing needle; (c) take up the paper in the right hand near one end, and show how to put one corner of it in a slanting direction through

the slit, and explain that the strip of paper is like a piece of flat, wide tape; (d) tell children to push the corner of paper well through the slit, and then turn the bodkin a little to the right, so that they can see the slanting corner; (e) tell children to pull the paper in such a way that the other corner is brought through as well as a little bit more of the strip; (f) show them how to fold the short end back on to the longer portion; (g) elicit that this is *threading* the bodkin, and compare with threading a needle.

5. Give the children some strips of soft paper, with hems fixed and tacked (the children will have done these in a fixing lesson previously), show them how to hold the hems in the left hand, and then how to put the pointed end through the hole at the end of the hem, and work the paper back towards the right hand into small pleats or gathers, till the bodkin point comes out of the hole at the other end of the hem; (b) show them how to work the hem back to the left so as to cover the long strip which has been pulled out; (c) let children see that a string must always be longer than the hem, through which it is to be placed; (d) take the bodkin off the paper tape.

N.B.—All this can be done without tearing the paper, and can be so taught as to be a cheerful, and an enlivening occupation.

THE STILETTO

Class.—The same as in above lessons.

Apparatus.—*For the Teacher and Children.*—Steel, bone (or wood, *Sloyd* made) stilettoes, or very coarse pins; paper or cardboard buttons (made previously by the children), or scraps of waste calico.

Method.—(a) Explain the meaning of the word, viz. a *little dagger*; (b) point out the different parts, e.g. the sharp point, the rounded knob; (c) show the use of the implement by pushing the sharp point through a piece of material to make a good-sized hole; (d) let children puncture the pieces of circular paper with the point of a pin in two or three different places in imitation of a bone or metal button; (e) explain that holes made by a stiletto on a garment are called *eyelet-holes*, and show children that these holes are *seamed* round very closely to form a stiff edge; (f) show that hooks are passed through these holes.

- N.B.**—1. The boys and girls could be shown how to sew on to another piece of double paper the cardboard or paper buttons.
2. Draw a large illustration of this implement on the slate, in the presence of the class.

THE INCH-MEASURE

Class.—The same as in above lessons.

Apparatus.—*For the Teacher.*—An ordinary tape inch-measure, large squares of paper or calico, a lead pencil, slate and chalks, T-square inch-measure.

For the Children.—Cardboard inch-measures, a square of paper or calico, a lead pencil (or a *Sloyd*-made wood measure).

Method. 1. (a) Draw an illustration of nine inches on the slate, to represent the cardboard or wood measure; (b) point out the divisions into halves, quarters, three-quarters, and eighths; (c) tell the children how many inches make one yard, how many half a yard, and how many a quarter yard; (d) question children on the name *inch-measure*, and call upon them to point out one inch, then the half,

quarter, three-quarters, and one-eighth of an inch, then a quarter of a yard, a half yard, and one yard.

2. Demonstrate, by means of a large square of paper and the illustration of a chalk square, on the slate, how to measure material: (a) Tell the children to place the square of paper quite straight on the desk in front of them, and show them that they must first measure the sides, going up and down towards them; (b) put an arrow mark on the slate illustration, and tell children to draw a stroke in the same direction on the paper; (c) show by the illustration on the slate and the T-square measure how to mark off the inches, halves, quarters, three-quarters, and eighths, by dotting the chalk line at each of these divisions (be most careful to demonstrate that the edge of the measure must be placed in a perfectly straight line along the straight edge of the material, whatever that might be); (d) show once more by your square of paper and inch-measure, and tell children to do the same; (e) examine their work, and question as to what they have done, and why.

3. When the children can mark off one inch and its divisions *accurately*, show them how to measure one and a half inches, or one and a quarter, etc.

4. Let children go on, step by step, till they can measure several inches at one command, and then several inches with any one division of an inch, and let them call this the *length*.

5. Recapitulate by measuring the opposite selvedge side in the same way, and afterwards the two woof edges, for the *width*.

6. When children can measure paper *accurately*, give them squares or oblongs of calico, and train them not only in the use of the measure, but also in the use of the terms

length and width. Question and examine after every new step.

DRILLS

Drill.—The term drill is closely connected with discipline in its modern and limited sense of control, and in this sense makes instruction possible to large classes. Needlework drills are action lessons in which the children's imitative faculties are largely exercised; they should always be short, bright, interesting lessons, and should be given with the precision of a drill-mistress. Needlework drills are of great use and value, not only in the infant schools, but in the lower classes of girls' schools. The purposes of these drills are manifold.

1. To interest the children, and make them obedient and attentive.
2. To make the children's hands supple and dexterous.
3. To make the children quick and industrious, without any undue excitement.

NEEDLE DRILL

Class.—An Infant Class.

Apparatus.—*For the Teacher.*—A very coarse carpet needle, coloured or white twine, or knitting cotton; and, in later lessons, a very coarse sewing needle, and coloured sewing cotton.

For the Children.—In early lessons, very coarse blunt-pointed needles, known as "Baby Threaders"; fine twine or knitting cotton; and, in later lessons, coarse sewing needles, and coloured sewing cotton.

Method.—1. Explain to the class the uses of the needle and cotton: (a) the needle is used to hold the cotton in its eye, to make a hole with its point, and to carry the cotton through the hole made in the material; (b) the cotton forms the stitches; (c) the needle and cotton must both be used in making stitches.

2. Exercise the children in distinguishing the right hand from the left hand.

The Right-hand Drill.—Raise the right hand and (a) show the class how to take up the twine, or cotton, very near one end, with the right thumb and forefinger; (b) then how to flatten and twist the end with the left thumb and forefinger, so that it can be pushed through the eye easily and quickly. (Demonstrate again, the class working with you.)

N.B.—This action must be repeated several times. The children must not be allowed to bite the cotton, because it is a dirty habit.

The Left-hand Drill.—Raise the left hand and show the class how to take up the needle with the left thumb and forefinger, the eye being upwards, and the needle being held at a moderate distance, straight in front of the worker. Repeat this action, telling class to work with you.

THREADING DRILL

Recapitulate the right- and left-hand drills. The children are now holding the needle and cotton properly and are ready to work with you:—

1. Bring the cotton in front and very near the eye of the needle.

2. Push the end of the cotton through the eye.
3. Put out the last three fingers of the left hand, and catch hold of the long piece of cotton, so that if the short end falls out before the action of threading is finished, it can easily be replaced with the right thumb and fore-finger.



FIG. 1.

4. Turn the left hand round so that the short end of cotton is pointing to the right, and can be seen by the worker (Fig. 1).
5. Pull the short end through with right thumb and forefinger, till both ends nearly meet.
6. Hold needle and double part of cotton straight overhead.
7. Put needles and cotton down.

N.B.—The action of threading the needle is very difficult for young children, so this lesson must be repeated many times, if necessary. After every action has been demonstrated and

explained, the teacher may drill either by numbers or words of command as follows :—

1. Take up cotton—and twist the end.
2. Take up the needle—and hold it in proper position.
3. Bring the needle and cotton—close together.
4. Push the cotton—through the eye.
5. Catch hold of long piece of cotton—with three fingers.
6. Turn the left hand—to the right (so that you can see short end better).
7. Pull the short end—till it nearly meets the other end.
8. Show needle and cotton—over your head.
9. Put needle and cotton down.

Notes.—1. Explain during the drill that threading the needle is putting cotton or silk or thread through its eye.

2. The punctuation of the drill for expertness indicates the pauses to be made. The words before the stops should be said slowly, and the words after quickly. The action of threading the needle (No. 4) requires more time, therefore a longer pause is necessary.

N.B.—This note applies to all drills by words of command.

3. Needle drill can be used for threading sewing needles, even in more advanced classes.

4. Some say that the teacher should use opposite hands to the children's during the drill; for instance, that the teacher should raise her left hand when the children raise their right hands and *vice-versâ*. This, however, is not progressive teaching. A mother or a kindergarten teacher would not do so, because such method would not train children to observe; and would be an impossibility in knitting-pin drill. This difficulty can be overcome if the teacher turns her back slightly to the children, being careful to keep her face towards the class.

N.B.—This note applies to all the drills.

5. In later lessons, teach how to thread darning and crewel needles.

THIMBLE DRILL

Class.—Any infant class.

Apparatus.—A bag or covered box of thimbles, assorted, infant sizes.

Method.—1. Exercise children in finger movements, and in distinguishing the right hand from the left.

2. Find a thimble that will fit each child's right-hand middle finger. Let a child monitor do this.

3. Explain the use of the thimble, viz.—(a) to cover the tip of the finger, and in this way to keep it from being pricked by the needle when sewing; (b) to push the needle through the work with the top of the thimble.

The Left-hand Drill.—Raise the left hand and (a) show the children how to close all the fingers into the palm, except the thumb and forefinger; (b) show how to take up the thimble at the top, with the left thumb and forefinger; and (c) how to turn it with the hole towards the right. Demonstrate the left-hand drill again, the children working with you.

The Right-hand Drill.—Raise the right hand and (a) show how to close in the fingers and thumb to form a fist; (b) then how to raise the middle finger; and (c) how to bend it towards the left hand. Demonstrate again, the children working with you. Repeat this drill many times.

The Drill for putting on the Thimble.—1. Recapitulate the left and right hand drills. The class is now ready to put on the thimbles.

2. (a) Show how to bring the middle finger of the right hand and the hole of the thimble close together; (b) how to put the hole over the tip of the finger; and (c)

how to press the top of the thimble with the right thumb, so as to fix it on securely.

3. Demonstrate again, the children putting on their thimbles at the same time.

4. Tell children to raise right middle finger to let you see that their thimbles are on.

5. Question them as to the uses of the thimble. When every action has been demonstrated and the children know what they must do, the teacher may drill them as follows :—

1. Take up the thimble—and turn the hole to the right hand.

2. Raise right-hand middle finger—and bend it towards the hole of the thimble.

3. Bring thimble and middle finger—close together.

4. Put on the thimble—and press the top with the right-hand thumb.

5. Show teacher—the thimble on.

6. Take off the thimble—and put it down.

N.B.—An object lesson on the thimble and its uses might precede the drill with advantage.

THIMBLE DRILL FOR OLDER CHILDREN

Method.—1. Take up the thimble at the top with the right-hand thumb and forefinger, and turn the hole towards the right-hand middle finger.

2. Put right-hand middle finger into the hole.

3. Press the top of the thimble with the right thumb.

4. Show the thimble on.

NEEDLEWORK DRILL

Class.—Infant and Girls' School Classes.

Apparatus.—*For the Teacher.*—A strip of very coarse calico, unfixed, a very coarse sewing needle and black sewing cotton.

For the Children.—Scraps of very coarse calico, neither too short nor too long, coarse sewing needles, black sewing cotton, and thimbles. (The needles should be fastened on the work.)

Method.—1. Tell children they are going to learn how to place their work properly, and how to use a needle and cotton to make slanting stitches. (Make sure every child has a thimble on the right finger.)

2. *Right Hand.*—(a) Show children how to raise the right hand and close the last three fingers into the palm; (b) how to take up the work at the top edge, a little way from the end, with the right thumb and forefinger (repeat these actions, the class working with you); (c) tell children to show their work that you may see they are all holding it correctly; then (d) to put their work down on the desks.

3. *Left Hand.*—(a) Show children how to raise the left hand and to close the last three fingers into the palm; (b) how to curve the left forefinger round towards the top of the thumb; (c) how to place the work on and round the left forefinger, well over the nail, but not beyond its first joint or crease; (d) how to keep the work in this position with left thumb and middle finger. (Repeat 2 and 3, the children working with you.)

N.B.—Explain why the work is placed on *one* finger and not on *two*; (a) it is easier to hold, and (b) it helps to make the stitches the right shape.

Thimble and Needle.—(a) Show children how to put the

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top of the thimble on the eye of the needle, and take the needle off the work with right thumb and forefinger.

N.B.—Explain that it is better to use the top than the side of the thimble when pushing the needle through the work. If the side of the thimble is used the needle may slip, and is then liable to be bent, and may prick the finger and so soil the work.

Making the Stitch.—(a) Show how to put the needle in a slanting direction towards the left, through a big piece of calico, close to the middle of the left thumb-nail; (b) take the needle out and show again, the children working with you this time.

N.B.—Explain that by putting the needle in a slanting direction through the calico a slanting stitch will be made, because the cotton will form the stitch, and will lie on the calico, where the needle is now.

(c) Show children how to move the right thumb away from the needle, and place it on the front part of the left forefinger, so that both thumb-nails touch each other, at the same time lifting the right forefinger off the needle.

N.B.—Explain why the thumb is moved, viz. that it may press against the left forefinger when pushing the needle through. If the right thumb is pressed on the needle, the worker may bend or break it.

(Repeat, the children working with you.)

(d) Show how to push the needle through, about half its own length, pressing at the same time the right thumb against the left forefinger, and then taking right hand away. Let children work with you. (e) Show how to draw the needle out a little way with right thumb and forefinger; and (f) how to put out thimble and next finger and catch the cotton under them. Let the children work (e) and (f) with you.

N.B.—Explain why cotton is caught under two fingers of right hand; (1) to keep it clean when the hand is warm, and (2) to

avoid breaking the cotton, or cutting the little finger. (By this method the cotton falls over the back of the little finger.)

(g) Show how to draw the needle and cotton out entirely, towards the upper part of the right forearm, the children working with you. Tell the children to fasten needles on the work, and place all on the desk.

When every action has been demonstrated and explained, and the children are able to describe what they must do, the teacher may drill them either by numbers or words of command thus :—

1. Work in position—on left forefinger.
2. Thimble and needle—in position.
3. Put the needle in a slanting direction—towards the middle of left-hand thumb-nail.
4. Put the needle through a big piece of calico—near the thumb-nail to make a big stitch.
5. Move the right thumb—to the front of left forefinger.
6. Push the needle through—half its own length.
7. Draw the needle and cotton out—a little way.
8. Catch the cotton—under two fingers.
9. Draw the needle and cotton—out entirely.
10. Fasten needles—on the work.
11. Put the work down.

Note.—Needlework Drill should be the basis of all early lessons in hemming.

CHAPTER II

HEMMING.—*The Stitch, Joining in two Colours, Fastening on, Fastening off, Fixing and Tucking a Hem*

HEMMING

Class.—Infant and Girls' Classes.

Apparatus.—*For the Teacher.*—The *Paragon* apparatus for hemming, or a strip of *Leviathan* canvas, fixed, tacked, with about two inches hemmed in black wool, and marked with a red or blue line, just below the edge of hem, slate and chalks.

For the Children.—Strips of very coarse unbleached calico or holland, fixed, tacked, with about two inches hemmed in black sewing cotton, and marked with a red or blue line just below the edge of hem, to enable very young beginners to distinguish the single material from the double, which forms the hem. The needle and cotton should be fastened on the strip. Each child should be fitted with a thimble.

N.B.—Some teachers give young beginners dotted calico for early lessons in hemming.

Method.—1. Draw an illustration of the strip on the slate. This picture interests the children, and explanations can be made more successfully by means of it.

2. (a) Teach the use of the stitch by showing the children some finished garments, such as a pocket-handkerchief, pillow-case, or shift; (b) show the children that the stitches already worked on their strips do fasten down the fold or hem, and (c) tell them they are going to learn

how to make hemming-stitches ; (d) write the word *hemming* on the slate.

(*Use of the Stitch.*—Hemming is used to fasten down a folded piece of material, called a *hem*.)

3. Recapitulate Needlework Drill, as far as making a stitch, then demonstrate as follows: (a) bring the cotton that is coming out of the hem, in a slanting direction towards the left thumb ; (b) put the needle in a slanting direction towards the middle of left thumb, a good distance from last stitch and *inside* the cotton ; (c) mark the place where

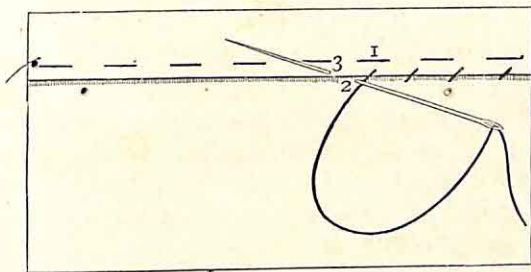


FIG. 2.

the cotton is coming out on the hem, No. 1, in slate illustration (Fig. 2) ; (d) show the children how to put the needle through the blue line below, and yet close to the edge of the hem, and how to bring it out on the hem, the needle slanting towards the middle of the thumb ; (e) mark the place where the needle goes through the single material, No. 2 in the slate illustration (Fig. 2), and where it comes out on the hem, No. 3 (Fig. 2) ; (f) explain that the cotton is brought from the last stitch towards the left thumb, so that the children shall not work *behind* the cotton, and by so doing spoil the shape of the stitch ; (g) show children (1) that your needle is going

through two pieces of the material, (2) that it is in a slanting direction, and (3) that the needle can be seen on the right side of the work; (h) take your needle out and demonstrate the method of making the stitch again, the children working with you.

4. Before the children draw the needle out to form the first stitch, examine their work thus: (a) tell them to turn the wrong side of the work towards you, that you may see if the needle is going through the blue line and the hem, inside the cotton, and in a slanting direction (Fig. 2); (b) tell them now to turn the right side of the work towards you, that you may see if the needle is showing distinctly through the calico; (c) give reasons for (a) and (b): (1) if needle is going through the calico *under* and *through* the edge of the hem, the stitch will fasten the hem down securely, and there will be no *slip-stitches*; (2) if the needle is in a slanting direction the stitch will be slanting both on the wrong and the right sides; (3) if the needle shows distinctly through the calico, on the right side, there will be no *split threads* of the calico.

5. Put the work again in position on left forefinger and recapitulate Needlework Drill, as far as drawing the needle and cotton out entirely.

Tell the children they must not draw the cotton too tightly, or they will *pucker* the hem, and perhaps break the cotton.

6. When the children have made a stitch on their strips, try to make them see that they have really made *two slanting stitches*, one on the wrong side and one on the right.

7. Always begin the lesson on hemming with Needlework Drill, and demonstrate the method of making the stitch collectively, many times, before you allow the children to work alone.

N.B.—This method of demonstrating collectively, illustrating, and examining requires time and great patience ; but if the class can only make one or two stitches during a lesson, and these are accurate in shape, and do securely fasten down the hem, the teacher will be well repaid for her diligence and care.

* 8. When the children know how to make the stitch, do not repeat Needlework Drill for placing the work on left forefinger, but show them how to move the strip round the left forefinger to the right so that they can work *onwards*, to the left.

9. Tell children hemming stitch is worked on the wrong side (*counter-hemming* is worked on the wrong and right sides of a garment), and the direction of working it is from the right hand to the left.

Notes.—1. Though hemming is always considered the most elementary of needlework stitches, yet it is a very difficult stitch to make correctly.

2. The collective lessons must be supplemented by individual attention, because in a large class there will always be dull children, who need extra care.

3. Infants should show some progress in hemming during the school year, and this progress should be marked by changing the colour of the cotton.

The progress made should be in—

(a) The shape of the stitches, *i.e.* *slanting*, and not upright.

(b) The size of the stitches, neither too big nor too small.

- (c) The regularity of the spaces between the stitches.
- (d) The absence of slip stitches and split threads of the calico.

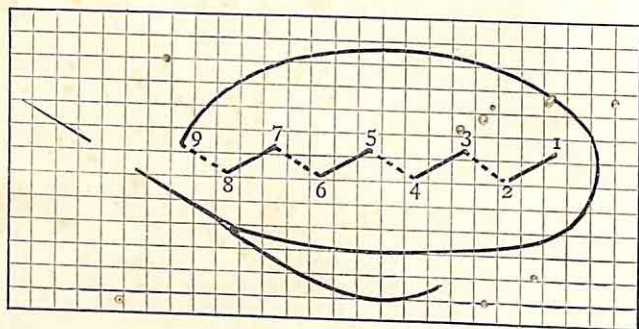


FIG. 3.

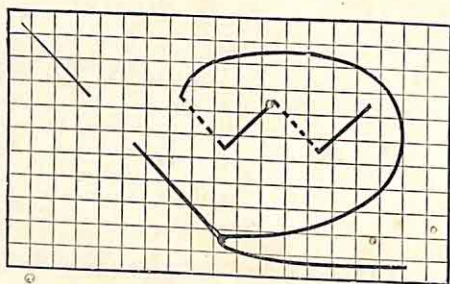


FIG. 4.

4. Many lessons will be needed before the children can be trusted to work on without help.

5. In illustrating the stitch (Fig. 3) the teacher can show that it is composed of two parts, both half slanting, and resembling the head of a broad arrow. In Fig. 4 the stitch is more slanting. No. 1 in Fig. 3 is where

the cotton comes out on the hem ; No. 2 is where the needle and cotton go in, on the single material, below the hem, and so on.

6. Hemming, according to Fig. 3, is suitable for fine calico, cambric, and muslin ; but according to Fig. 4, it is better for very coarse materials, where a deeper and

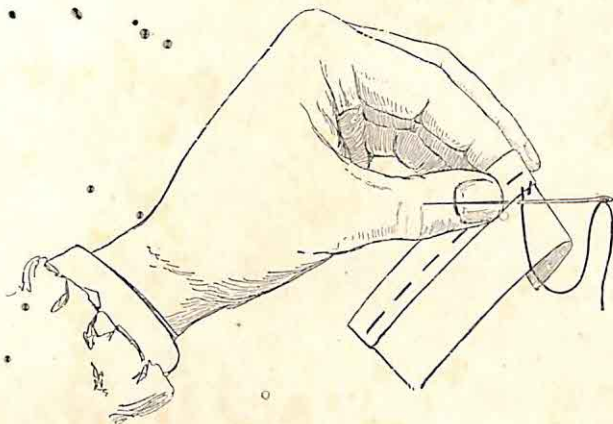


FIG. 5.

stronger stitch is needed. In making hemming or felling stitches, as in Fig. 4, it is impossible to slant the needle to the middle of the left thumb.

HEMMING IN TWO COLOURS (*To show a Join*)

Class.—*Infant and Girls' Classes.*

Apparatus.—*For the Teacher.*—The *Paragon* apparatus with a few stitches worked in red and another cord of blue (or a strip of *Leviathan* canvas, partly hemmed with

red wool, and a new needleful of blue wool), slate and chalks.

For the Children.—A strip of unbleached calico or holland partly hemmed in red cotton, and a needleful of blue cotton, thimbles.

Method.—1. (a) Show children a strip already finished and hemmed in red and blue cotton, and (b) tell children they are going to learn how to fasten on with a different coloured cotton, that they may see the result of the join.

2. Draw an illustration of the partly hemmed strip on slate (Fig. 6).

3. (a) Recapitulate Needlework Drill, to set the class

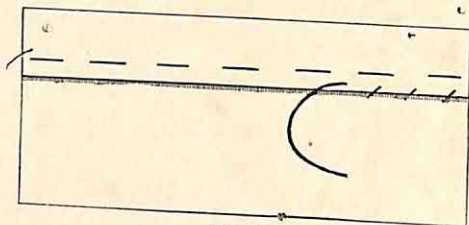


FIG. 6.

working together, and tell the children to make one or two hemming stitches; (b) show them how to wind the nearly used-up cotton once round the middle finger and break it by drawing it tightly against this finger; (c) explain that by breaking the cotton in this way they will neither break it off too close to the hem, nor pucker the hemming stitches.

4. Show children how to lift the edge of the hem, and draw out the half stitch lying under the fold.

5. Illustrate on the slate (Fig. 7).

6. (a) Show children how to put the needle with blue cotton under the edge of the hem in a slant-

ing direction to the right, and through the mark left by the red cotton (Fig. 7); (b) how to draw the needle out, leaving an end of the blue cotton as long as the red cotton; (c) how to tuck these ends under the hem with the point of the needle; and (d) how to press the left thumb on the hem to keep the ends in place: (e) how to hem a few stitches onwards to the left; (f) how to pull the cotton slightly, to find out if the ends are securely fastened.

N.B.—This is both a neat and strong method.

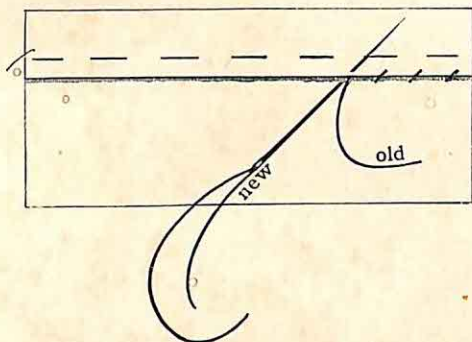


FIG. 7.

7. Illustrate the wrong and right sides of the strips, showing the joins in two coloured chinks (Figs. 8 and 9).

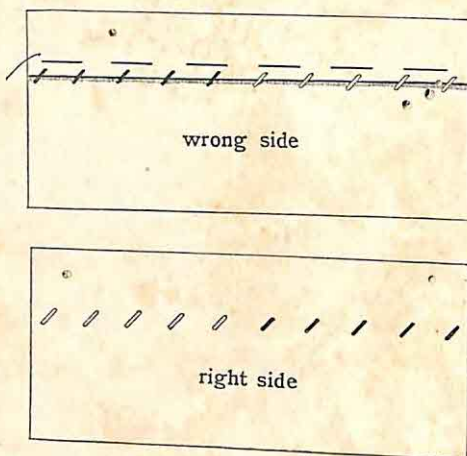
Notes.—OTHER METHODS OF JOINING.

1. Put the needle under the edge of the hem, close to the place where the red cotton is coming out, and then tuck both ends under the hem, and work onwards to the left. This method produces a double stitch where the new cotton is joined on.

2. Put the needle under the edge of the hem close to the red end of cotton, then place both ends to the left, along the

outer edge of the hem, and work onwards to the left, over the two ends. By this method both ends of cotton are fastened down securely, *outside* the hem.

Both these methods are strong, but not so neat as that given in the lesson above.



FIGS. 8 AND 9.

FASTENING ON (*Hemming*)

Class.—Infant and Girls' Classes.

Apparatus.—*For the Teacher.*—The *Paragon*, or a very coarse strip of calico, needle and coloured sewing cotton, thimble, slate and chalks.

For the Children.—A strip of calico, fixed and tacked, needle and coloured sewing cotton, thimbles.

Method.—1. Tell children they have learnt how to fasten on a new needleful of cotton in the middle of a strip, and now they are going to learn how to fasten on for themselves at the beginning of the strip.

2. Draw an illustration of the strip on the slate, and put a chalk dot, about an inch from the end, and mark it No. 1.

3. (a) Recapitulate Needlework Drill for placing the work and holding the needle and cotton; and (b) show the children where to begin on their strips, about an inch from the right-hand side edge.

4. (a) Show how to put the needle under the edge of the hem in a slanting direction to the right; (b) how to draw the needle out, leaving a short end of cotton; (c) how to tuck this end of cotton under the hem with the point of the needle; (d) how to press left thumb on the hem to keep the cotton in place; (e) how to hem onwards to the left; (f) how to pull the cotton a little, after a few hemming stitches have been made, in order to find out if the end of cotton tucked under the hem is securely fastened.

5. Elicit that this method is the same as fastening on in the middle of the strip.

6. Tell children that they must try to fasten on close to the right-hand side edge in the next strip, and not an inch from the edge.

Examine children's work after every step has been demonstrated.

FASTENING OFF. (*Hemming*)

Class.—Infant and Girls' Classes.

Apparatus.—*For the Teacher.*—A strip of calico, nearly finished, slate and chalks, thimble.

For the Children.—A strip nearly finished, thimbles.

Method.—1. Recapitulate Needlework Drill, and work a few hemming stitches with the class.

2. (a) Show the children how to make two hemming stitches over the last stitch ; and (b) how to put the needle through the second stitch to form a half-knot, and then draw it tightly to the hem, and break off the cotton.

Second Method.—When the end of the strip is reached, (a) show children how to slip the needle back under the hem, and bring it out on the hem ; (b) how to hem onwards to the left over a few stitches ; (c) how to put the needle through the last stitch to form a half-knot, and draw it up tightly to the hem.

N.B.—Both methods are strong ; the first is, however, neater than the second, and much easier for young children. There are double stitches, both on the wrong and right sides, in the second method.

FIXING AND TACKING A HEM

Class.—Girls.

Apparatus.—*For the Teacher.*—A leaflet from a finished copy-book, a strip of coarse calico, needle, sewing and tacking cotton, thimble, slate and chalks.

For the Children.—Leaflets from finished copy-books, needle and tacking cotton, thimbles, or

Strips of waste calico, needle, tacking and sewing cotton, thimbles.

Fixing a hem on paper.

Method.—1. (a) Show children how to place the paper, with the lines going from left to right ; (b) how to turn one fold from the top edge towards the bottom edge, by a line of the writing, with right thumb and forefinger of both hands ; (c) how to flatten this fold at its edge with the fingers ; (d) how to turn a second fold, counting two lines down from the edge of the first fold, towards the bottom edge, and press it in the same way as they did

the first fold; (e) show children that the second fold is deeper than the first one.

2. *Knot Drill*.—Show children how to make a knot in the tacking cotton thus:—

(1) Take up the cotton near one end, with the left thumb and forefinger.

(2) Take hold of long cotton with right hand, and wind it round back of left forefinger and bring it between left thumb and forefinger, so that it crosses the cotton already lying there, still holding the long end with right hand.

(3) Keep the left thumb on the crossed cotton, and move the thumb forwards and backwards against the left forefinger till the cotton is worked off.

(4) Put left middle finger on the rolled cotton and draw it down towards the short end, and pull the long end upwards with the right hand.

N.B.—This is a very effective drill.

3. Tell children to show tacking cotton with a knot at one end, and tell them they must only make knots in *tacking* cotton, and never in *sewing* cotton.

4. Teach children how to tack the hem thus: (a) elicit that the side with the fold turned down is the wrong side, and that this side must be held towards them when tacking; (b) show by your own apparatus that tacking must be fastened on above the edge of the hem, a little distance from right-hand side edge, by putting the needle through the double material, quite straight from right to left, and making it a rather short straight stitch on the right side; (c) show how to pass over a longer piece of material on the wrong side, and put the needle through the double material, again quite straight from right to left, and on

the same line as the knot; (d) let children see they have made two straight stitches, the one on the wrong side being longer than the one on the right side; (e) recapitulate till the hem is tacked, and show how to fasten off, by working over the last stitch twice, and take needle off the cotton.

N.B.—Tacking stitches should not be made too short nor too long; if too short, they are difficult to draw out; if too long, the hem is not firmly tacked. Tacking must be neat and firm.

Fixing hem on calico.

Method.—1. Tell children they know how to fix a hem on paper, how to make a knot in tacking cotton, and how to do tacking stitches; now they are going to learn how to fix and tack a hem on calico, which is much more difficult, because there are no lines to help them in keeping the edges straight. But they must try to do difficult things, and if they try often enough they will be sure to succeed.

2. (a) Show children how to hold the strip of calico, with the longest or selvedge sides going from the left to the right; (b) how to turn down one fold of the calico the depth of their little finger nail, beginning at the right-hand top edge, with right thumb and forefinger; (c) how to go on turning down this fold with left thumb and forefinger; and (d) how to flatten and press it at the top edge with the left middle finger or right thumb and forefinger.

N.B.—Pleating and pinching the folds make creases which soon get soiled, but this process is necessary if fixing the *weft* way of any material, as then flattening and pressing would stretch the material too much.

3. Demonstrate again and illustrate the appearance of the first fold on the slate (Fig. 10).

4. Examine the work at every step.

5. (a) Tell children the second fold must be deeper than the first fold, so that the raw edge shall not be rolled; (b) show them how to measure from the top edge of the strip downwards, holding wrong side towards them, the depth of their thumb-nail, and turn this fold down towards the bottom edge; (c) how to flatten and press it at the top edge with left middle finger or right thumb and

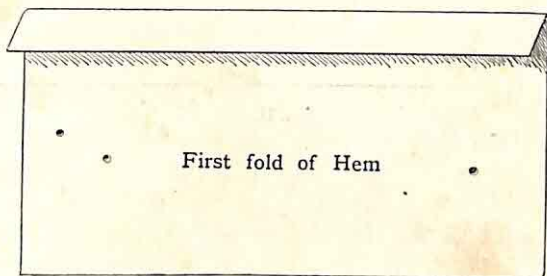


FIG. 10.

forefinger; (d) how to put the strip on the desk with the wrong side uppermost.

6. Illustrate the second fold on the slate (Fig. 11).

7. (a) Show that the raw edge is hidden by the second fold; (b) explain that a hem is used for two purposes—(1) to hide the raw edge and prevent it from raveling out; (2) to form a border on such garments as pinafores, pocket-handkerchiefs, aprons, petticoats, and chemises, and on articles like pillow-slips, sheets, and table-cloths.

The folded material is heavy, and keeps the edges of the garments down.

8. Recapitulate the drill for making a knot in the cotton, and the *tacking stitches*.

9. Illustrate tacking stitches on slate (Fig. 11).

Note.—This lesson must be repeated several times to get children to fix evenly and well.

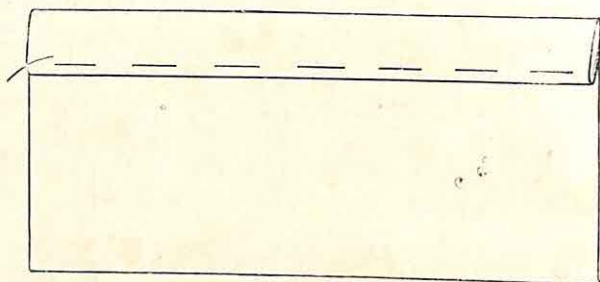


FIG. 11.

CHAPTER III

TOP-SEWING—SEW AND FELL SEAM—JOINING IN TWO COLOURS—FASTENING ON AND OFF IN SEAMING

FIRST LESSON ON SEAMING (*Top-Sewing*)

Class.—Infants and Girls.

Apparatus.—*For the Teacher.*—The *Paragon*, or two pieces of Java cloth, fixed, tacked, and about two inches already sewn, slate and chalks.

For the Children.—Two strips of very coarse calico (5 in. \times 2½ in.) fixed, tacked, and about two inches sewn

in coloured cotton, and the front edge marked with a red or blue line, thimbles.

Method.—1. Draw an illustration of the strip on the slate, and make use of it, when demonstrating the way of putting the needle in, and the spaces between the stitches (Fig. 12).

2. (a) Show children how to take up the work at the right-hand top edge (holding the side marked with blue line towards you) with right thumb and forefinger close to the last stitch sewn; (b) repeat, the children working with you;

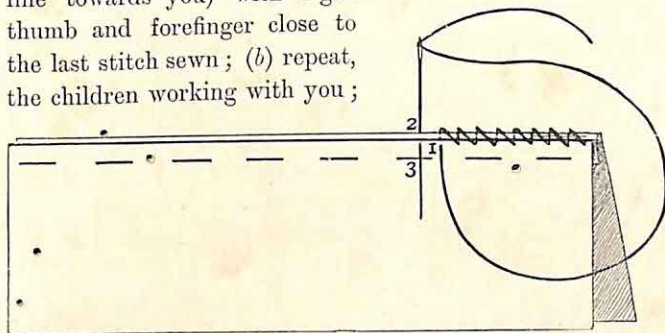


FIG. 12.

(c) show how to put out the left forefinger quite straight; (d) how to place the work along the front of this finger, so that the last stitch with the cotton coming from it is half-way between the finger-nail and first joint; (e) how to put the left-hand thumb against the work at this spot, and the short end round the tip of the left forefinger, keeping it in place with the left middle finger; and (f) how to pleat up as much of the longer end of the strip as can be held with ease, between the left thumb and forefinger.

(Explain that the longer end is pleated up into the hand to prevent (1) the spoiling of the shape of the

stitch, and (2) to help to keep the shorter end in its place, along the front of the forefinger.)

Repeat, the children working with you.

3. Elicit that this way of holding the work is different from hemming, but that the direction of working the stitch from the right to the left is the same.

4. (a) Show how to hold the work at a moderate distance in front of the chest; (b) how to curve the right

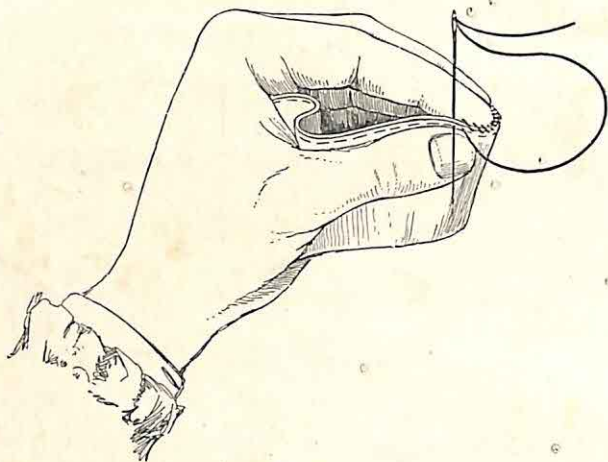


FIG. 13.

hand with needle and cotton round towards the work, on the left forefinger, keeping the elbow away from the side of the body, and yet a little in; (c) how to put the needle through the back and front edges, over the thumb-nail, in a straight direction towards the chest, a little distance from the last stitch (Fig. 13); (d) then recapitulate Needlework Drill for drawing the needle out (see Needlework Drill); (e) repeat the whole method for making a stitch, the children working with you; (f) illustrate the

position of the needle, and the space to be left between each stitch (Fig. 13).

N.B.—The needle and cotton in sewing must be drawn out towards the right shoulder. Examine children's work to see (1) if needle is put through the two edges, very near the top; (2) if the needle is in quite straight, and the right distance from the last stitch, neither too near nor too far away.

5. When the children have sewn the two edges as far as the first crease in the forefinger, show them how to move the work round the tip of the finger, to enable them to sew onwards to the end.

6. When the sewing is finished, show the children how to press the seam flat and smooth with the thumb-nail, or top of thimble, or with a bone flattener, and explain that this is done for neatness.

7. Explain that the *seam* is the line formed by the sewing together of the two edges.

8. Tell children that *top-sewing* is used (*a*) to fasten two selvages together, like the sides of a pillow-slip, or a man's night-shirt, and to make a pinafore and apron broader, by joining together the selvages of two breadths; and (*b*) to join the two folded edges of material, like their strip-work; the ends of bands for shifts, drawers, petticoats, and collar-bands of shirts and night-gowns.

9. Show by a finished garment that the stitch is worked on the right side of the material.

N.B.—The difficulties of sewing are:—

1. Slip-stitches, *i.e.* taking only one top edge at a time, instead of both.
2. Puckering, by misplacing the work, and drawing the

- cotton too tightly, and making a slanting stitch instead of a straight one.
3. Putting the needle in too far down from the top edge, and thus making a deep, hard ridge, most difficult to flatten.
 4. Putting the stitches too close together, thus marring the shape of the stitch, which ought to be slanting on the top edges, on the right side of the work, and straight on the wrong side.
 5. By omitting to flatten the sewing, when the seam is finished.

Note.—Sewing stitches can be taught most successfully and clearly on the folded edge of the Stockwell Demonstration Frame, even to children. The advantages in demonstrating by this frame are as follows: (1) the teacher can show on a large scale, so that all the class can see distinctly what she is doing;

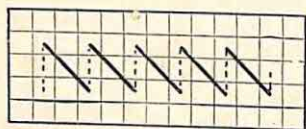


FIG. 14.

(2) the teacher can show clearly that sewing is made of two stitches, one slanting on the folded edge, and one straight, underneath; (3) by making the stitches two threads apart, the idea of the spaces between the stitches is more easily conveyed.

(4) If the frame is used, illustrate the shape of the stitch on the kindergarten board, or a sectional diagram on the slate (Fig. 14).

SEW-AND-FELL SEAM (*Fixing*)

Class.—Girls in Lower Classes.

Apparatus.—*For the Teacher.*—The *Paragon*; two

strips of very coarse holland or calico, needle, tacking and sewing cotton of two colours, slate and chalks, thimble.

For the Children.—In the first fixing lesson, leaflets from a finished copy-book or lined cutting-out paper—the lines being good guides for folding—then strips of coarse calico (5 in. \times 2½ in.), needle, tacking and sewing cotton of two colours, thimbles.

Method.—1. (a) Show a garment, *e.g.* a pillow-slip, shift, or chemise, with a sew-and-fell seam completed; and (b) tell children this kind of seam is used (1) to join two straight or two shaped sides of a garment, so as to hide the raw edges both on the right and the wrong sides; (2) to patch a calico garment, to put a new top to a chemise or shirt, and to lengthen a garment, *e.g.* a calico petticoat; (c) explain that a sew-and-fell seam is a very strong way of joining two edges of material together.

2. Call children's attention to the two strips of calico being marked with a pencilled cross to indicate the wrong side; (a) show how to take up one strip and hold the long or selvedge sides between the left and right hands, having the marked side towards them; (b) show how to measure from the top edge downwards the depth of their little finger nail, as a guide for the depth of the first fold; (c) then how to turn this fold down very evenly and flatten and crease the edge with the right thumb and forefinger; (d) tell children to put this strip down on the desk with the wrong side uppermost; (e) illustrate the appearance on the slate (Fig. 15). Examine children's work.

3. Take up the second strip in the same way as the first; and (a) show children how to turn down a fold, on the wrong or marked side, twice as deep as the fold on the first strip, telling them the depth of their thumb-nail will

be a guide in turning the fold quite evenly; (b) flatten and crease the edge as in the first strip; (c) elicit that the wrong side of the strip is uppermost; then (d) show children how to turn up the raw edge of this fold towards the top, so as to form a second fold, the raw edge of

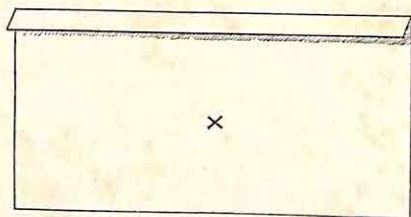


FIG. 15.

which lies in a straight line just below the crease; (e) flatten and crease this fold; (f) illustrate on slate (Fig. 16). Examine children's work.

4. Point out very clearly the part which forms the *fell*, and explain that a *fell* in calico or muslin is a double fold, and in flannel a single fold that falls over another fold of the material, to hide the raw edges.

5. (a) Show children how to turn the strip, with the double fold or *fell*, with the wrong side away from them; (b) how to place it on the top of the strip with one fold,

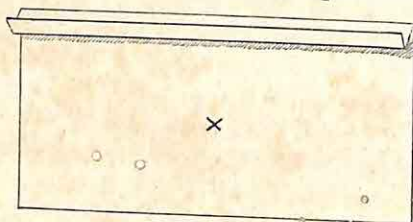


FIG. 16.

so that the top and side edges are quite even, and the raw edges are hidden; (c) illustrate on the slate (Fig. 17); (d) examine and question.

6. Recapitulate making a knot on the tacking cotton; show children how to begin tacking at the right-hand side edges a little below the top edges, thus:—

- (1) Put the needle through the front strip to the back;
- (2) then go over a little space on the back strip, and

bring the needle through to the front strip again, holding the work with the left thumb and forefinger.

N.B.—When a few tacking stitches have been made in this way, place the work on the left forefinger as for hemming, and go on tacking neatly and firmly to the end. Take the needle off the tacking cotton, and thread it with the sewing cotton.

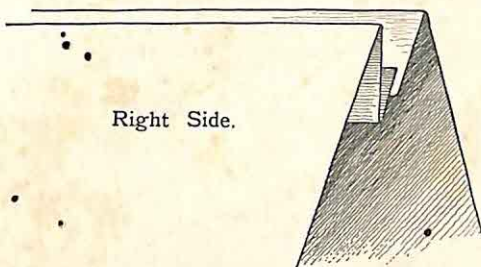


FIG. 17.

7. Show children that the front strip with the fell on it, is narrower than the back strip, and elicit the reason of this.

8. Illustrate the appearance of the work when tacked, putting a blue or red line on the top edge of the front strip, as a guide for the depth of the stitches.

FASTENING ON, AND JOINING TWO COLOURS IN SEAMING

Fastening on at the beginning of the work.

Method.—1. When the work is in position on left forefinger (*a*) show either by the *Paragon*, or *Folded Demonstration Frame* (Fig. 19) how to put the needle in through the top edge of the front strip, towards the worker, how to draw it out and leave an end of cotton lying on the top edges; (*b*) mark No. 1 on slate illustration (Fig. 12) and then

show how to put the needle in through the back and front top edges a little further to the left of No. 1, and draw it

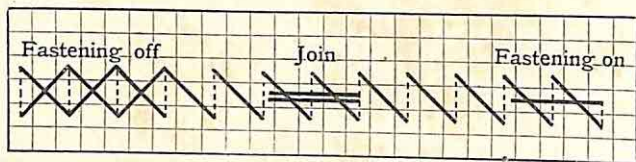


FIG. 18.

out. Mark Nos. 2 and 3 on Fig. 12, and draw the shape of the stitch.

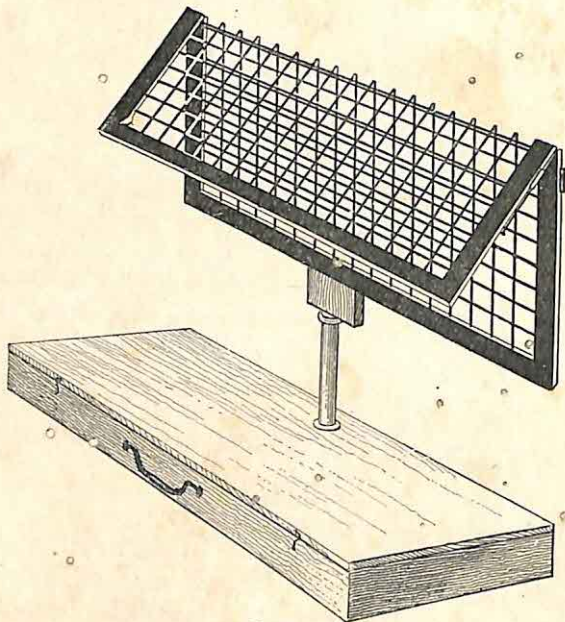


FIG. 19.

2. Go on demonstrating by the *Paragon*, or Folded Frame, and illustrating, till the children have worked over

the *fastening on* cotton, and can work the stitches without help.

3. Examine children's work, and explain that the *fastening-on* end of cotton must not be pushed down, or the raw edges will be pushed down also, and will form hard ridges.

N.B.—When the children have seamed half the strip with one coloured cotton, show them how to wind the cotton round the left forefinger and break it off.

4. (a) Show children how to draw the end of cotton out from the front edge by putting the needle down between the edges, and lifting up the half stitch; (b) with another coloured cotton show how to put the needle in the same place, where the half stitch was before; (c) how to draw the needle out and leave an end of cotton; (d) how to put both ends of cotton to the left on the top edges, and seam over them.

• 5. Illustrate on the slate (Fig. 18).

6. Examine children's work, and question them to find out if they know the way to fasten off and on, when a fresh needleful of cotton is needed.

N.B.—If the fastening off and on in the middle of the strip-work has been demonstrated on the Folded Frame, then illustrate by a sectional diagram (Fig. 18).

FASTENING OFF (*Seaming or Top-sewing*)

Method.—1. Show children how to work over the last stitch two or three times, putting the needle through the last stitch to form a half-knot, draw it tightly, and then break the cotton.

Or 2. When the end of the strip is reached, show children how to put the needle through to the back strip,

turn the work round, and sew over several stitches, thus making double stitches.

Or 3. Show children how to seam back from left to right over several stitches, in this way forming crosses. (Fig. 18).

FELLING AND JOINING IN TWO COLOURS

Method.—1. Take out the tacking cotton and flatten the seam.

2. Turn back the front strip, and (a) show children that the *fell* is falling over the fold belonging to the back strip, and that it is hiding the raw edge; (b) show children how to tack the fell, just like a hem; (c) tell them the stitch used for fastening down a fell is hemming, but now we change the name and call it *felling*; (d) write the word *felling* on the slate; (e) recapitulate fastening on, and the method of working the stitch; (f) when the fell is partly fastened down, recapitulate the join in two colours (see lesson on joining in two colours in hemming); (g) when the fell is finished, recapitulate fastening off, which is the same as for hemming.

CHAPTER IV

USE OF DEMONSTRATION FRAME — HERRING-BONING —
DARNING A THIN PLACE — STITCHING — MAKING A
BAND

USE OF THE DEMONSTRATION FRAME

Class.—Girls, Pupil Teachers and Students.

Apparatus.—*For the Teacher.*—A Demonstration Frame with needle and cord, a square of canvas, flannel, and calico, a slate and chalks.

For the Children.—A square of canvas (lined or unlined) needle and coloured knitting or embroidery cotton, scraps of flannel and calico, thimbles.

Method.—1. (a) Compare the canvas with the flannel and calico, and all these materials with the frame ; (b) elicit that the frame and all these materials have threads running up and down and across, and that they are all woven in the same way, only that the threads of the frame are coarser than those of the canvas, the threads of the canvas coarser than those of the flannel, and those of the flannel coarser than the calico ; (c) show that the spaces between the threads of the frame are greater than the spaces between the threads of the canvas, and those of the canvas greater than those of the flannel or calico.

2. Explain that the frame is made to represent canvas, flannel, calico, and such-like woven materials, on a very large scale, so that the class can be shown collectively how to work any needlework stitch accurately (Figs. 19 and 20).

Definition.—The Demonstration Frame is an apparatus by means of which the teacher can show clearly and accu-

rately how to make needlework stitches for all materials, except knitted ones.

3. Write the title of the lesson on the slate.

4. Show the children (*a*) that hemming, herring-boning,

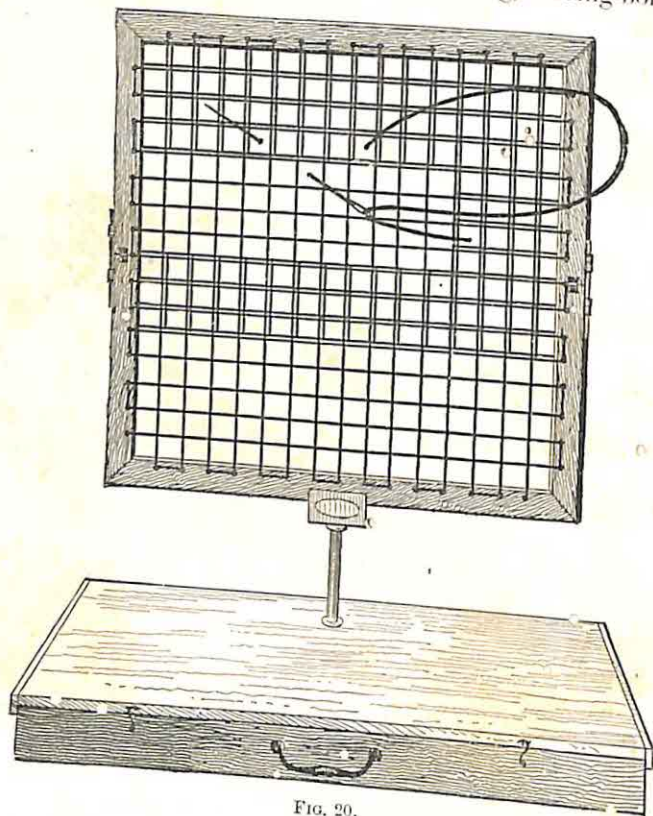


FIG. 20.

and stitching can be worked on the fold at the top of the frame; (*b*) that when the frame is folded seaming and felling can be worked, as for a sew-and-fell seam, and, in addition, buttonhole-stitch, whipping.

5. Tell the children (*a*) that they are going to learn

three new stitches, viz. herring-boning, darning, and stitching (write these words on the slate), that these stitches must first be practised on canvas, and afterwards on flannel and calico; that each of these stitches must be worked according to rules with regard to a certain number of threads, and so they can be more easily and quickly learnt by practising on such material as canvas, where the threads are very coarse and distinct, and can easily be counted.

6. Draw a sectional diagram of the canvas on the slate (unless a chequered or kindergarten board is available), and show on it, whatever stitch is taught after the lesson on the frame.

7. Work herring-bone stitch with the class to show the use of the Demonstration Frame.

N.B.—Stitching or darning might be worked first, if preferred.

HERRING-BONE STITCH

Class.—Girls.

Apparatus.—*For the Teacher.*—Demonstration Frame, sectional diagram on slate, chalk, square of canvas (lined or unlined), needle and coloured knitting or embroidery cotton, square of flannel.

For the Children.—Square of canvas (lined or unlined) needle and coloured cotton, scrap of flannel.

Method.—1. Tell children the use of the stitch, viz. to fasten down one fold of flannel, or any other woollen material, which is too thick to be folded twice.

2. Show the children (*a*) how to hold the canvas over the left forefinger as for hemming; (*b*) show the direction of working the stitch from the left side of the material to

the right; (c) compare the direction of working hemming and seaming, viz. from right to left.

3. Tell children to put their work in position, and to hold their needles and cotton in the proper way, then to watch what you do on the frame.

N.B.—If the canvas is lined, the lining is the wrong side, so tell the children to hold the canvas side towards them.

4. *Fastening On.*—(a) Turn the wrong side of the frame towards the class, and work the stitch on the fold at the top of it; (b) show children how to bring the needle through a space four threads up from the bottom edge of the fold from the wrong to the right side, and leave an end of cotton.

N.B.—As it is a first lesson on the stitch, the fastening on can be better taught, when the stitch is worked on flannel. Demonstrate again, the children working with you.

5. Put a dot of coloured chalk on one of the spaces at the left-hand side of the sectional diagram on the slate, and mark it No. 1.

6. Demonstrate by frame: count four threads to the right of where the cotton is coming out on the fold, and four threads down, and put the needle straight under two threads from the right to the left, below the edge of the fold. Take the needle out and demonstrate again, the class working with you. Examine children's work.

7. (a) Show the children how to draw the needle out under the cotton coming from No. 1, and explain that this is a half stitch; (b) elicit that this half stitch is slanting and is four threads deep on one side; turn the frame round that children may see there is a short straight stitch covering two threads on the other side.

8. When children have drawn their needles out to form

the first half stitch, recapitulate by illustrating on the sectional diagram the appearance of it. Let the children count with you, telling them the lines represent threads; (a) count four lines to the right of No. 1 and four lines down, and put a chalk dot in the space below the fourth line, and mark it No. 2; (b) count two lines to the left and put a chalk dot, and mark it No. 3; (c) draw a slanting line from 1 to 2 through the diagonals of the squares, and dot a straight line from 2 to 3 (Fig. 21). Examine children's work.

9. Tell children to take up work in readiness to make the next stitch.

N.B.—The first is left a half stitch, because it helps to keep all the succeeding stitches upright, and when herring-boning a patch it can be finished off, but if herring-boning a fell in flannel, it is left a half stitch.

10. (a) Demonstrate by the frame how to count up from where the cotton is coming out four threads, and to the right four threads; (b) put the needle under two threads, double material of the fold, quite straight from right to left; and (c) draw the needle and cotton out; (d) tell children this is the first half of the second stitch, and that it crosses the first half stitch at the bottom; (e) demonstrate again, the children working with you. Examine work.

11. Recapitulate by illustrating on the sectional diagram; (a) count up from No. 3 four lines or threads, and to the right four lines, and put a chalk dot in the space above the fourth line, and mark it No. 4; (b) count two lines to the left, and mark the space No. 5; (c) draw a slanting line from 3 to 4, and dot a straight line from 4 to 5 to represent the short straight stitch on the other side (Fig. 21).

12. Demonstrate by the frame how to finish this stitch : (a) count down four threads from where the cotton is coming out, and four threads to the right ; (b) put the needle under two threads from *right to left* and draw it out under the cotton as before ; (c) tell children the second stitch is now finished, and is composed of two slanting stitches (the second half stitch crossing the first half at the top) and two straight stitches, one at the top on double

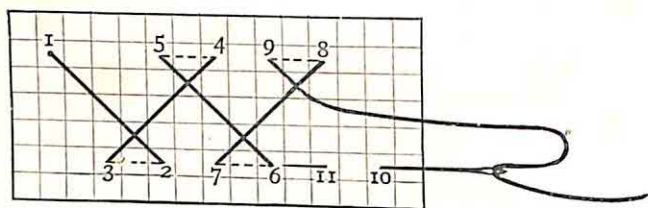


FIG. 21.

material of the fold, and one below the edge of fold on the single material.

13. Illustrate as before on the sectional diagram. Examine children's work.

14. Demonstrate another whole stitch, then let children tell you how to work a complete stitch on the frame, and how to draw a picture of it on the slate.

15. Explain the rule for the stitch, viz. four threads deep and two threads apart, the stitches crossing each other alternately at the bottom and the top, and when worked on flannel the stitch is taken through the double material at the top, and through the single material at the bottom, just below the raw edge.

16. When you have demonstrated and explained, let the class work on alone, and go in and out among the children to see that all have learnt the stitch. The

children who have made mistakes should be formed into a separate class, and taught again as above, by the frame and slate, collectively.

Notes.—1. When the stitch has been learnt and practised on the canvas, the children should be allowed, as soon as possible, to apply it to a fold on flannel. The whole method of working it should be again recapitulated by the teacher.

2. The difficulties of the stitch are only discovered by the children, when they work it on flannel or woollen material, for it is comparatively easy to them when worked on canvas. The canvas is only useful for learning the shape and size of the stitch.

3. Herring-bone stitch is called "catch stitch" in America.

DARNING A THIN PLACE

Class.—Girls.

Apparatus.—*For the Teacher.*—Demonstration Frame, needle and cord, slate and chalks, square of cheese-cloth or single-thread canvas, needle and knitting or D.M.C. embroidery cotton for the canvas.

For the Children.—A square of cheese-cloth or single-thread canvas in the first lesson, needle and knitting, or embroidery, cotton.

Method.—1. (a) Show children a flannel vest or petticoat, or a frock which has been darned, and explain that this part of the garment was worn into a thin place and was darned to prevent the weakened threads from breaking into a hole; (b) show that a worn place on a garment is always very much stretched, and is consequently loose.

2. Tell children they are going to learn how to darn on canvas first, because they can count the threads more easily, and will be able to learn the rules more quickly.

3. Tell children that darning should precede patching

on such garments as flannel vests and petticoats, table and bed linen, and dress materials, and that it is a more economical method of mending than patching.

4. Explain that darning, as a rule, is worked on the wrong side of the materials, except in lined parts of a garment, where it would be impossible to separate the lining from the outer material, then it is done very neatly on the right side, and well pressed with a hot-iron.

5. *Shape of Darns*.—Show by the garments that the shape depends upon the position of the worn part, a diamond, triangular, or waved shape darn being best for the gusset or armpit part of a flannel vest; oblongs and squares for plain shaped parts of the garment.

6. Show children how to hold the work over the back of the first and second fingers of the left hand, keeping it in place with the thumb and third finger, and tell them that the work must be kept in this position all the time they are darning, the needle pointing in a straight line towards them in one row, and then pointing away from them in the next.

7. (a) Show by the frame how to put the needle under and over the threads down and up with the selvedge, and explain that darning is weaving in the new mending material, in order to cover the weft or crosswise threads both on the right and on the wrong sides, so as to strengthen and protect every thread.

8. Draw a sectional diagram on the slate, and mark the thin place, putting in crosses to show that the darning or weaving in of the new material is always begun on the stronger threads away from the thin place first, to form a firm border.

9. Demonstrate a row of darning on the single material on the wrong side of frame, beginning at the left top (or

bottom) corner, and draw the needle out, leaving an end at the top, the children working with you. (a) (1) Explain that it is less awkward to darn from the left side of the material to the right, (2) that the fastening on always belongs to the first row, (3) that every row must be worked in straight lines between the selvedge threads and on coarse material under and over one thread, (4) that

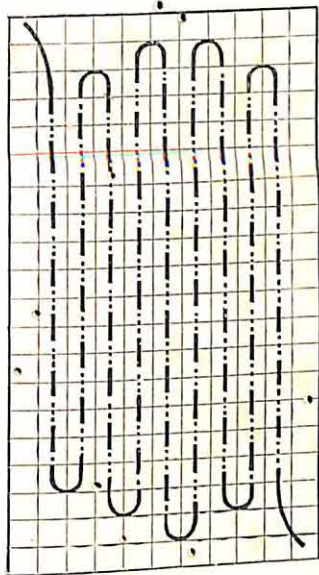


FIG. 22.

in fine materials the needle may be put under and over more than one thread, but whatever number the needle is put under, it must also be put over; (b) draw a line of darning on the sectional diagram on the wrong side (Fig. 22); (c) demonstrate on the frame, the children working with you, how to darn the second row thus:—(a) count one selvedge thread to the right and one weft thread below the space, where the cotton is coming out (or one thread above) and put the needle under and over one

thread, stopping one thread below the space from which the fastening-on cotton is coming, draw the needle out and leave a loop at the bottom; (b) explain (1) why a thread is left between the rows, viz. to make room for the darning material, and so prevent a hard cobble; (2) why one thread lower down or higher up is gone under in the second row, viz. to produce irregular edges at the top and bottom, and thus to equalise the strain of the new

2. (a) Show by the fold on the top of the frame, as well as by the bands and seams on the garments, that the stitch is always worked on double material, and explain that it is for this reason their canvas samplers are lined; (b) show children that the work is held as for hemming, and that the stitch is worked from the right hand to the left, and on the canvas side of the sampler; (c) bring the needle from the wrong side to the right, through a space between two threads, and leave a long end of cotton, which will be fastened on afterwards; (d) demonstrate again, the children working with you.

3. Put the chalk mark on a space between two lines of the sectional diagram, which you will have previously drawn on the slate, and call it No. 1 (Fig. 24).

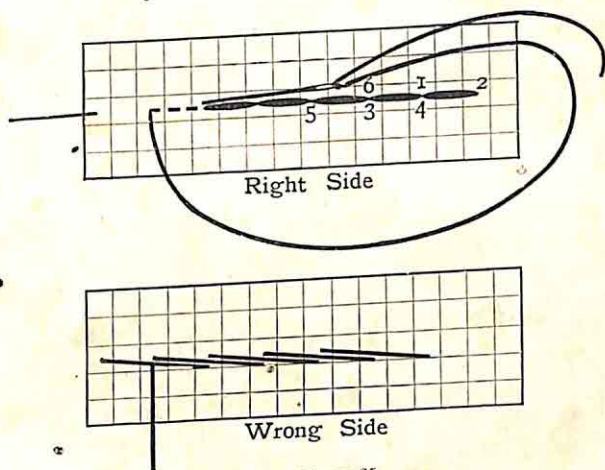
4. (a) Tell children to count with you two threads *back* from where the cotton is coming out on the fold, and show them how to put the needle in quite straight from right to left, and bring it out two threads in front of the cotton, drawing it rather tightly to raise the stitch; (b) demonstrate again, the children working on their canvas and counting two threads to the right of where the cotton is coming out, and two threads to the left of it; (c) let the children see the needle is lying under four threads, and then tell them to draw the needle and cotton out; (d) elicit that the stitch on the right side is short and raised, covering two threads, and on the wrong side it is a long stitch, covering four threads; (e) tell children two thread stitching is prettier and stronger than three, four, or five thread stitching—that is, if they are working on coarse materials.

N.B.—Three or more threads are allowable on fine materials.

5. Recapitulate by drawing the appearance of the

stitch, both on the right and wrong sides: count two lines back from No. 1, and put a dot in the space, and mark it No. 2; count two lines in front of No. 1, and mark the space No. 3; draw a short rounded stitch from No. 1 to No. 2, and dot a line from No. 2 to No. 3 to represent the long stitch (Fig. 24).

6. Show by the frame how all the succeeding stitches are worked; (a) count back two threads, and show



FIGS. 24 AND 25.

children how to put the needle in a slanting direction in the space close to the first stitch and above (or below) the cotton at the back, and bring the needle out two threads in front of the cotton, drawing it rather tightly; (b) explain why the needle is put above (or below) the cotton at the back—(1) to prevent splitting and tangling the cotton; (2) to make the wrong side of the stitches neat; (3) to increase the regularity of the stitches on the right side. Demonstrate again, showing how to press the

cotton down at the back, by the help of the left forefinger, the children working with you.

N.B.—In putting the needle above or below the cotton at the back, care must be taken to prevent a wave-like appearance of the stitches on the right side. If this occurs, show children how to put the needle in the space vertically, close by the last stitch, and then how to turn it in a slanting direction to the left under four threads.

7. (a) Recapitulate by drawing the stitch on the sectional diagram (Fig. 24) as before; (b) show by the illustration that the needle being put above the cotton, every succeeding stitch on the wrong side lies above the preceding, and slants from left to right; (c) because the needle is put back every time a stitch is made, the long stitches on the wrong side cover two back threads, which form a part of each preceding stitch (Fig. 25). Examine children's work.

8. Tell children this stitch is also called *back-stitching*, because the needle is always put back in making a new stitch.

9. Demonstrate by the frame and board, the children working with you, till they can tell you what to do in making a stitch, and can give reasons for every step. Examine children's work after every stitch, to see (1) if the number of threads have been covered, (2) if the cotton lies above (or below) every preceding stitch, and (3) if the stitching has been kept in a straight line, between two threads.

FASTENING OFF AND ON (STITCHING)

Apparatus.—*For Teacher and Children.*—The same as for the first lesson on stitching, and two different coloured cottons, to show the result of the join.

Method.—1. Show by the frame (a) how to put the needle back two threads from where the cotton is coming out and above the cotton of the last stitch on the wrong side; (b) draw the needle and cotton through to the wrong side; (c) take the needle off the cotton; (d) let the children see that the fastening-off cotton comes out on the wrong side in the middle of the stitch and above it; (e) illustrate on the slate (Fig. 26); (f) tell children to thread the needle with the new needleful, and then show by another coloured cord and the frame how to fasten on; (g) show how to bring the needle from the wrong side to the right two threads to the left of the last stitch, and

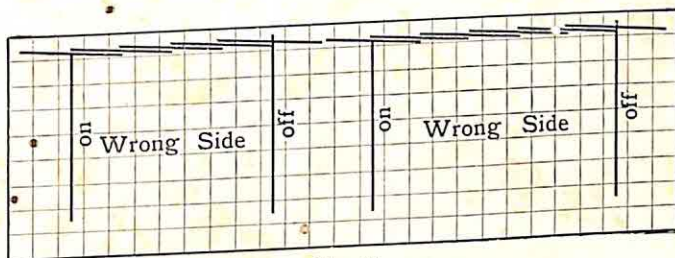


Fig. 26.

leave a long end of cotton, then go back two threads to the right and two threads forward to make a stitch; (h) turn the frame with wrong side to class and show that the *fastening-on* cotton lies in the middle of the stitch and *below* it (Fig. 26); (i) let children work on till this cotton is nearly used up, then show them again how to put the needle back to the right over two threads above the cotton on the wrong side, and bring it out on the wrong side; (j) show them how to weave the needle and cotton under each long stitch from right to left, to form a cord, then cut the cotton; (k) go back to the fastening off and

on, in the middle of the work, and tell children to thread the needle with the *fastening-off* cotton (red), and show that this must be woven *under* five or six of the long stitches from the left to the right, then cut the cotton; (l) tell children to thread the needle with the fastening-on cotton (blue), and show them how to weave this *over* the long stitches to the left, and again cut the cotton.

N.B.—This is an elaborate method, but a very neat and strong way of fastening off and on in stitching.

Notes.—1. Another method of fastening on and off is simply to slip the needle between the folds of the band, and leave an end of cotton at the edge of the band.

2. A third method is to fasten on and off at the back of the band by a few running stitches, working over the last stitch two or three times.

MAKING A BAND FOR STITCHING

Class.—Girls.

Apparatus.—*For the Teacher.*—A very coarse piece of calico (5 in. \times 2½ in.) or a piece of Java cloth, sewing needle, tacking and sewing cotton, slate and chalks.

For the Children.—Very coarse calico (5 in. \times 2½ in.), needle, tacking and sewing cotton, thimbles.

Method.—1. Draw an illustration of the piece of calico on the slate.

2. Show children how to hold the calico with the selvedge sides going from left to right.

3. Teach children how to find the selvedge way of the material; (a) tell them the long sides of the material are the selvedges; then let them pull one long side to see if it stretches much or little, next let them pull the weft, or one short side for the same purpose, and elicit that the

weft way of the stuff stretches the most, the selvedge way the least; (b) point out the difference between the selvedge threads and the weft threads, viz. that the selvedge threads are coarse and twisted, the weft threads wavy and flat, and will break easily when pulled; (c) tell children the selvedge can also be detected by the sound made when pulling it, the selvedge way has a sharp sound, whereas the weft way has a flat or dull sound.

4. *Fixing*.—(a) Show children how to turn one fold about the depth of the little finger nail along both selvedge

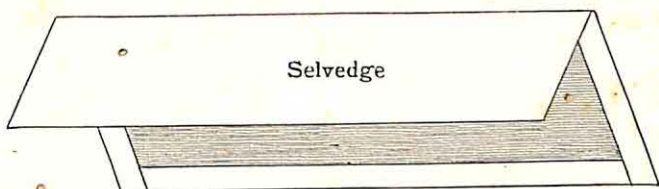


FIG. 27.

sides; (b) how to turn one fold along both weft sides, making all these folds the same depth, and flattening and pinching the edges; (c) explain that the selvedge sides are turned first to keep the corners flat; (d) show how to fold the material in half along its length or the selvedge way, thus hiding the folds and forming a band; (e) illustrate on the slate (Fig. 27).

5. *Drawing a Thread*.—(a) Show children how to pick out, with the point of a needle or pin, one selvedge thread a quarter of an inch from the top edge, then how to hold the band between the left thumb and forefinger and draw it backwards, the right thumb and forefinger pulling the thread outwards; (b) if the thread breaks, show patiently and carefully how to pick out the broken one, or the band will be spoilt (Fig. 28).

N.B.—1. The children should be taught to draw the thread from scraps of calico first. 2. It is easier to draw the thread, before the edges of the band are tacked, than afterwards.

6. (a) Show children again how to fold the band in half, being careful that the drawn thread is in a straight

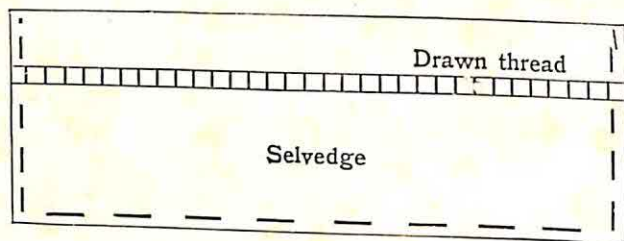


FIG. 28.

line; (b) recapitulate the tacking stitch, tacking two short sides and one selvage side.

7. By means of the Demonstration Frame, and a sectional diagram on the slate, recapitulate *stitching and fastening on and off of the same*.

CHAPTER V

SEWING ON A TAPE—PLEATING—FIXING HEMS ON JOINED MATERIAL

SEWING A TAPE STRING ON A BAND

Class.—Girls.

Apparatus.—*For the Teacher*.—A stitched band, a piece of tape, needle, tacking and sewing cotton, pins, slate and chalks, a strip of kindergarten paper to demonstrate the folding of the tape.

For the Children.—A stitched band, a piece of tape about 2 or 3 inches long, needle, tacking and sewing cotton, pins, a strip of paper.

Method.—1. Show some garments with tapes sewn on, *e.g.* apron, pinafore, pillow-slip, drawers, and elicit (a) that tape strings are used to fasten the garments tidily; (b) that tapes can be sewn both on the wrong and right sides of a garment.

2. *Fixing the Tape.*—(a) Show children (first by the strip of paper) how to crease the tape in half, then fold the creased edge at right-hand top corner down to the open edges to form a triangle; (b) open the tape and show that the depth from the raw edge at the top to the point of the triangle is half the width of the tape; (c) show how to turn this down for a fold; (d) show how to turn the right-hand top corner down to the opposite edge of tape, to form a triangle, holding the wrong side towards you; (e) then crease the triangle back to the right side of tape; (f) open the tape and let children prove that from *c d* to *e f* is a square, the whole width of the tape; (g) illustrate on the slate (Fig. 29).

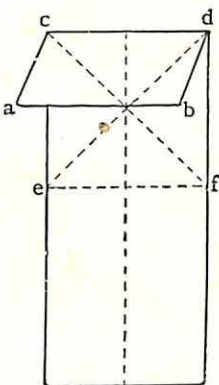


FIG. 29.

Rule 1.—The first fold of the tape (except in very narrow tapes, when the first fold must be the whole width) is half its own width.

2. The tape sewn on the band is a square, or the whole width of the tape, except in very narrow tapes.

3. *Fixing Tape to the Band.*—(a) Show children how to

crease the band along its length; (*b*) illustrate by a dotted line (Fig. 30); (*c*) put the wrong side of the band uppermost; (*d*) tell children the band is only wide enough for one string, and this must be placed evenly near one end; (*e*) show how to place the wrong side of the tape to the wrong side of the band with the folded edge of the tape (*c d*, Fig. 30) on the band, and the creased line across it (*e f*, Fig. 30) at the edge of the band, the crease down the middle of the tape matching the crease along the centre of the band; (*f*) show children how to pin this square of tape on the band quite evenly and neatly; (*g*) illustrate on the slate, and examine children's work, then let them put a few tacking stitches to keep the tape firmly in its place.

N.B.—The tape may be seamed to the edge of band, before it is hemmed.

5. Recapitulate hemming stitch: (*a*) show children how to fasten on neatly at *f*, and hem as far as *e* through the wrong side of the band *only*, if the material is coarse and thick, if very fine and semi-transparent then through both thicknesses, being careful that the stitches are seen distinctly on the right side; (*b*) illustrate on slate when the three sides are hemmed (Fig. 30) and examine children's work, then show how to bring the needle through the edge of the band to the right side, and fold the tape back to the wrong side of band; (*c*) show how to hold the right side towards them, and seam it through the edge of the band from *e* to *f*, and fasten off securely; break the cotton and flatten the seam; (*d*) illustrate the seaming stitches (Figs. 30 and 31) on right and wrong sides; (*e*) turn the wrong side of band towards you and show children how to finish off the end of tape neatly by a narrow hem; (*f*)

recapitulate top-sewing the corners and hemming; (g) illustrate on right and wrong sides (Figs. 30 and 31).

Notes.—1. In the first lesson it is better to teach how to fix a tape to the wrong side of the band, to prepare the children

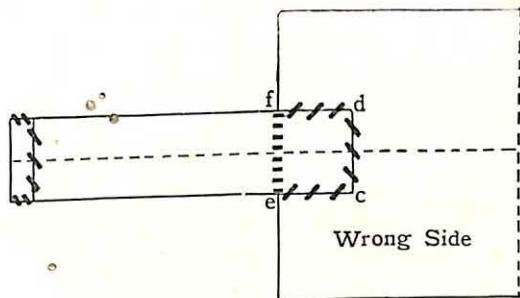


FIG. 30.

for sewing on a tape to the band of an apron, or child's drawers. In a later lesson the children should be taught how to put a tape on to the hem of a pillow-slip or on a pinafore, both on the wrong and right sides.

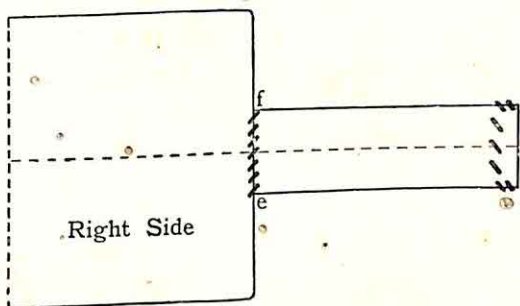


FIG. 31.

PLEATING

Class.—Girls.

Apparatus.—*For the Teacher.*—A woman's or girl's

apron and band, pins, needle, tacking and sewing cotton, a card inch measure, slate and chalks.

For the Children.—A woman's or girl's apron, previously hemmed, a band fixed and the ends seamed, needle, tacking and sewing cotton, pins, card inch measure, thimbles.

Method.—1. (*a*) Show the children a finished garment, *e.g.* an apron, shift, flannel petticoat or flannel drawers, and explain that pleats are folds which are used instead of gathers to narrow the full part of a garment, either at the neck, or wrist, or waist, or leg; (*b*) show by the finished garments that pleats differ in size, for instance they are smaller at the neck, wrist, or leg of a garment than at the waist; (*c*) that they are made on the right side of a garment, the *weft* way of the material like gathers, and that they must be regular in size; (*d*) that the rule for pleating the fulness of a garment into a band is as follows, *viz.* the portion of the garment to be pleated must be two to three times the length of that portion of the band, into which it is to be fixed.

2. (*a*) Show children how to divide the top part of the garment and the band into halves and quarters, for the sake of regularity, when setting in the pleats, and put a few stitches to mark the divisions; (*b*) illustrate an apron on the slate (Fig. 32), and mark the centre line C, and the two sides A and B.

3. Show how to mark off at top of apron with inch measure, 1 inch to the right and left of C, and put in pins, and mark the illustration D and E, and explain that this will be left plain.

4. (*a*) Show next how to measure 2 inches from E towards B and put in a pin, then how to crease these 2 inches in the middle on the right side of the garment so that the fold is 1 inch wide on its upper and under sides;

(b) turn the work to the wrong side and crease the edge of the under part of pleat in order that it may fall back to the right; (c) let children see that there are now three parts all 1 inch wide, *i.e.* the two parts of the pleat, and the single material upon which it rests; (d) put in a pin to keep the pleat quite even and in its place; (e) illustrate on the slate (Fig. 32), examine children's work and explain that the apron has been narrowed by the pleat 2 inches.

5. (a) Show children how to measure 2 inches from

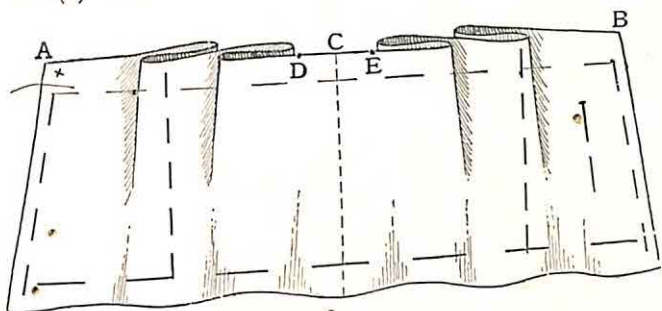


FIG. 32.

the edge of the first pleat towards B, and again demonstrate how to crease it in half on the right side, and how to crease on the wrong side, that the pleat may fall towards the right, putting in a pin to keep it in its place, and the top edges quite even; (b) illustrate on the slate and examine as before; (c) elicit from the children how much the apron has been narrowed by the two pleats; (d) show that the edge of the pleat on the wrong side touches the front edge of the first pleat, because no spaces are left between the pleats.

N.B.—Explain that spaces are left between the pleats, when the fulness is not twice or thrice the length of the band.

6. When the right-hand side of apron is pleated, then show children how to tack the pleats firmly and securely, about a quarter or half an inch from the top.

7. Recapitulate by pleating from D towards A, the pleats on this side falling to the left. Illustrate, examine, elicit, and question, step by step.

N.B.—Some prefer the pleats falling towards the centre of the apron (Fig. 33).

Notes.—1. The lesson to children should be given on lined paper, the lines being a quarter of an inch apart, to allow them to measure accurately and easily.

2. If spaces are left between the pleats, they should be kept as regular as the spaces between tucks.

Setting Pleats into the Band.—1. (a) Show children how to put the apron between the edges of the band, the centre creases matching, and the band resting on the line of tacking stitches, about a quarter of an inch or more from the top edge; (b) show how to fasten the band to apron with a pin; (c) demonstrate most carefully how to set the pleated portions into the band, so that the under half of pleat shall not be pulled out of place; (d) pin the band to every pleat; (e) show how to tack the band firmly and securely to the apron, and then remove pins; show how to fell the band to the apron.

2. Turn to the wrong side and show how to fix this side of the band to the apron, viz. (a) by letting children begin at the right-hand seamed edge of band and tacking that portion, that goes beyond the sides of the apron, as well as the band to the apron, being careful that the edge

of the band rests on the stitches from the right side, and that the edges of the pleats are flat; (b) show how to top-sew the edges of the band, that go beyond the sides of the garment; (c) then how to fell the band to the garment.

N.B.—1. Great care is needed in fixing the band, to prevent its being puckered, and so that the pleats are not clumsily huddled together.

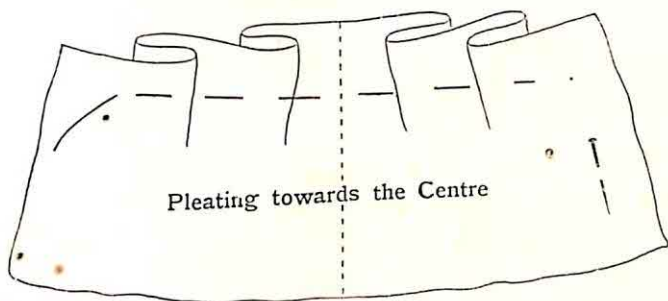


FIG. 33.

2. A bib and a pocket both hemmed first and then seamed to the garment are improvements to a working apron. Strings are sometimes needed at the ends of the band; these can be sewn on by children. The apron should be cut out by older girls.
3. Pleating is a very difficult exercise, and the children may not be advanced enough to pleat their own garment work, but they should be encouraged to practise pleating on scraps of calico, as well as on lined paper.
4. Pleating towards the centre is to make the fulness fall to the front of the garment, and pleating from the centre towards the sides throws the fulness to the hips and back.

FIXING HEMS ON JOINED MATERIAL

Class.—Girls.

Apparatus.—*For the Teacher.*—Two strips of very coarse calico (5 in. \times 2½ in.), two coloured sewing cottons, tacking cotton, needle, slate and chalks.

For the Children.—Two strips of coarse calico (5 in. \times 2½ in.), needle, two coloured sewing cottons, and tacking cotton.

Method.—1. (a) Tell children they learnt how to fix a sew-and-fell seam, and how to join two coloured cottons, both in seaming and felling, in former Lessons, and that they are now going to do the same with the two strips of calico, and then learn how to fix a hem on all the four sides; (b) explain that it is difficult to fix two breadths of material, when joined by sew-and-fell seam, because the seam must be matched on the hem, and that when four sides are fixed, the corners need skill in fixing.

2. Recapitulate the lessons on *sew-and-fell seam*, and the *join in two colours*, and when all the children have finished this part of the exercise, demonstrate the fixing of the hems.

3. Illustrate the joined material on the slate, and number the corners 1, 2, 3, 4 (Fig. 34).

4. (a) Tell children to turn the work with the wrong side towards them, and with the sew-and-fell seam going across, and turn down one fold the depth of the little

finger nail, on the right-hand side, marked 1 and 2 in Fig. 34; (b) show children how to turn the second fold a little deeper than the first, and (c) recapitulate the tacking stitch; (d) illustrate on the slate; (e) show how to fix and

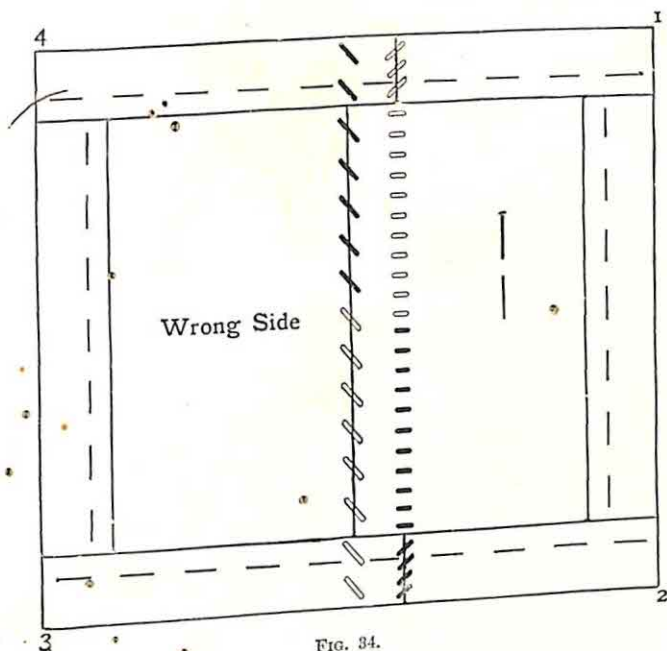


FIG. 34.

tack the left-hand side, marked 3 and 4 in Fig. 34, in the same way.

5. (a) Show children how to turn the crosswise of the material, telling them the two sides 1 and 4, and 2 and 3, need great attention, on account of the sew-and-fell seam and the corners; (b) show how to turn down one fold the same depth as for the selvedge hems; (c) then how to turn the second fold deeper than the first, being careful

that the edges of the corners are even and flat, and that the line of seaming and felling stitches on the right side lies on the stitches on the wrong; (d) recapitulate the tacking stitch, showing children that the stitches at the corners must be taken through, so that they may lie flat and even, and at the seam the tacking stitches must be placed closer together, because of the thickness, and to keep the seam in its proper place; (e) illustrate one side at a time.

- N.B.*—1. If the children have already fixed a hem on a pocket-handkerchief, the above lesson would be somewhat familiar to them.
2. This exercise is to prepare the children for a lesson on turning the sides of a sheet to the centre; and hemming the sides, which have had all the worn parts cut off.

CHAPTER VI

DARNING A THIN PLACE ON STOCKING-WEB—GATHERS—
SETTING-IN

DARNING A THIN PLACE ON STOCKING-WEB MATERIAL

Class.—Girls.

Apparatus.—*For the Teacher.*—A specimen of plain knitting, made of 8, 10, or 12-ply black or crimson fleecy wool, fastened to the Paragon Frame, or to a slate, a very coarse darning needle, and white or black 6-ply fleecy wool; the Demonstration Frame, slate and chalks, a knitted sock or stocking or vest, which has this kind of darn on it.

For the Children.—A waste piece of knitting, or a cuff in wool or cotton, darning needle and suitable mending material, of a contrasting colour, that children may see the difference between the darned and undarned surface; or a piece of cotton stocking-web, darning needle, and coloured embroidery (D.M.C.) or knitting cotton (Strutt's), and a scrap of canvas.

Method.—1. Draw on the slate illustrations of the right and wrong sides of the web, and of the canvas.

2. Contrast the knitted web on the Paragon Frame with the canvas of the Demonstration Frame, the children contrasting their piece of web with the canvas at the same time, and elicit the differences; (*a*) that the stocking-web is quite different in manufacture, because it is formed of

loops which interlace, some going up and some going down; (b) that the stocking-web stretches a great deal and then contracts again; (c) that the right and wrong sides differ very much, the right side being plain knitting and the wrong side purl; (d) that the loops form ridge-like rows across or round the material on the wrong side, as well as perpendicular rows of up-and-down loops, while on the right side the perpendicular rows, as well as the crosswise rows, form a pattern like the links of a chain interlaced; (e) that the canvas of the frame and their piece of canvas are formed of threads and not loops, that it does not stretch in the same way as the stocking-web, but that spaces are left between the threads; that the difference between the right and wrong sides is not so striking as in stocking-web.

3. *Position of the Work.*—Show children how to hold the web over the first and second fingers of the left hand with the wrong side towards them, because the darn for a thin place is always worked on the wrong side, and with the ridge-like rows going from left to right, and the up-and-down loops running from top to bottom.

4. *The Darn.—First Row.*—(a) Explain that they are going to learn how to strengthen and protect the weakened loops by the same stitch which they learnt on canvas; (b) that the fastening on and off must be on the stronger loops away from the worn part, and that the darning must be worked from the left to the right above and below the worn part; (c) show by the knitting frame how to put the needle under one down loop, at the left-hand top (or one up loop at the bottom) corner, over one and under one, till the whole of the thin place is covered, and draw the needle and cotton out leaving a short end.

N.B.—When drawing the needle and cotton out, it is necessary to put the left thumb on the web to prevent puckering the darn.

(d) Explain that if we begin at the top, we must always put the needle under and over the down loops, but if we begin at the bottom we must put the needle under and over the up loops, or when we pull the needle and cotton out we shall drag the stocking-web out of shape. Recapitulate, the children working with you on their web; examine children's work.

5. Illustrate the first row with a coloured chalk on the wrong side of diagram (Fig. 35).

6. *Second Row.*—(a) Show by the knitting frame how to come down one ridge, below the loop from which the darning material is coming, and then how to put the needle under the up loop in the next perpendicular row, and proceed as before, till the whole space is darned as far as the ridge of loops below that from which the fastening-end of cotton is coming; (b) take your needle out and demonstrate again, the children working on their material as well as watching how you do it, draw needle and cotton out and leave a loop; (c) elicit that a thread was left between every row to make room for the darning cotton, when they darned on the canvas.

Note.—When darning on stocking-web material no rows must be left between, because the web is so very elastic, and when it is stretched there is plenty of space for the new darning wool, or cotton, or silk.

(d) Explain why loops of darning material are left at the bottom and top of the darn: (1) to allow of the new material working up into the original, and (2) to allow of shrinking in the case of wool, when the garment is washed; (e) explain why they must come down one ridge,

and not put the needle under the up loop in the same ridge as the down loop in the first row: (1) so that the rows of loops shall be covered alternately on the right

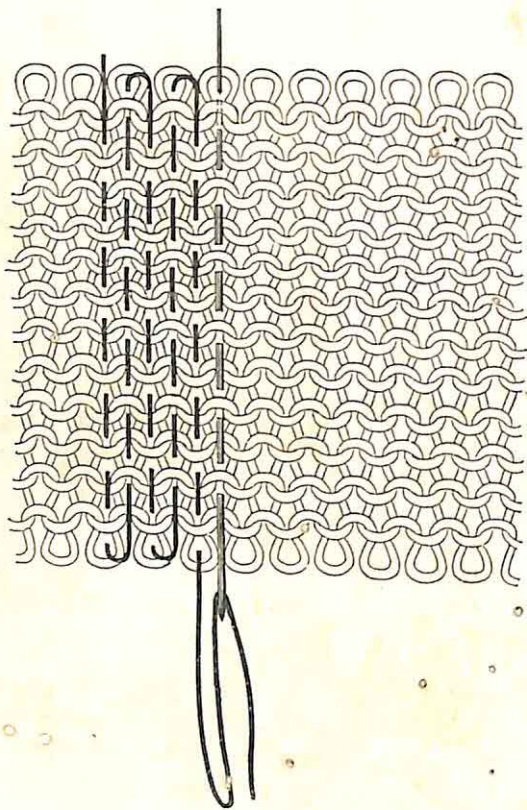


FIG. 35.

and wrong sides. Stretch the knitting on the frame to prove that every loop on both right and wrong sides is covered, if they come down one ridge; (2) that the top and bottom edges will be irregular, and the strain of the

new darning material will be the same all over the surface of the thin place.

7. Illustrate the second row on diagram (Fig. 35). Examine children's work.

8. *Third Row.*—(a) Show by the knitting frame how to put the needle under the same down loop as in the first row, and proceed as before, *i.e.* under one loop and over one loop, till the row is the same length as the first row of darning.

9. Illustrate on the slate (Fig. 35), and elicit (1) why we darn a thin place; (2) why we leave loops; (3) why no rows of stocking-web loops are left between each row of darning; (4) why in the second row of darning we either come down a ridge, if working from the top to the bottom, or go up a ridge, if we are working from the bottom to the top; (5) why we go under and over the down loops in darning downwards, and under and over the up loops in darning upwards; (6) why the top and bottom edges must be irregular.

10. *Fourth Row.*—Show by the knitting frame that this row is darned in the same way as the second, recapitulating the whole of the method, the children working with you, and in answer to your questions, giving reasons for what they are doing. Go on in this way, till the whole of the thin place is covered. Illustrate the shape of the darn on the slate.

N.B.—The shape may be a diamond, an oblong, an octagon, or a circle, according to the position of the thin place.

Notes.—1. As soon as the children can darn a thin place on waste pieces of knitting, or on the coarse woven stocking-web, let them try to darn the heels and toes of the new socks or stockings, which they have knitted. This can be done in school if there is time, or as a home lesson. Explain that

the heels and toes are darned to thicken the parts which have the most strain.

2. Children *must* learn on waste knitting, but they should, as soon as possible, practise what they have learnt on a garment. This is practical, and the only way of meeting the complaint of persons, who take our elementary school girls into their domestic

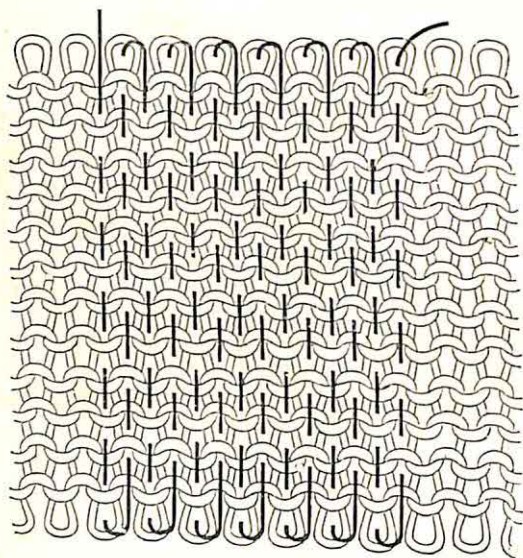


FIG. 36.

service, "that these girls can spoil new materials, but cannot mend their worn or torn garments."

3. Encourage the girls to bring to school worn socks and stockings in a clean condition, and show them how to hold these while darning, and suggest the shape that will be best for the thin places, and give the girls time in school to practise the darns, if possible.

4. Some people in darning stocking-web material do not go down or up one ridge in the second row, as described in direction No. 6 above, but put the needle under the up loop

in the same ridge as the down loop, thus covering a ridge twice in every row of darning.

GATHERING.

Class.—Girls.

Apparatus.—*For the Teacher.*—The Paragon or two pieces of Java canvas, or Tea cloth, one piece to represent the garment, the other for the band, needle and coloured tacking and sewing cotton, the Demonstration Frame, slate and chalks. A finished garment, *e.g.* a chemise, night-shirt or nightgown, or blouse, to show the use of gathers; pins.

For the Children.—Two pieces of coarse calico, needle, tacking and coloured sewing cotton, pins.

Method.—1. (a) Show by the finished articles that gathers are used to narrow a garment either at the neck, shoulder, waist, wrist, or leg (and then are set into a band or yoke or cuff), and at the same time to give fulness either above or below the band; (b) show by the garments that the gathers are made across the material, and not up and down with the selvedge; (c) show by comparison that gathers are better than pleats in some garments.

2. Give the children one piece of calico, which is to represent the garment in the first lesson.

3. Draw an illustration of this on the slate (Fig. 37).

4. (a) Show children that the calico is broader than it is long, and that the shorter sides are the selvedges; (b) let them pull the selvedge and the woof of the material for practice in finding out the way of the stuff; (c) show them how to turn down narrow hems on the selvedge sides first, and then on one long side, and tack these hems, to make the specimen neat, and more like such a garment

as an apron ; (*d*) illustrate the tacked hems on slate, and mark the diagram with an arrow to indicate the selvedge way of the material.

5. (*a*) Show the children how to divide the calico down its length into halves and quarters, creasing the material at first, and then showing children how to put a few stitches at the divisions on the wrong side of the material ; (*b*) explain that these divisions are necessary in

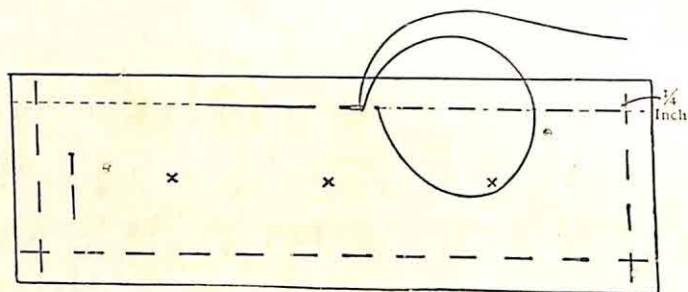


FIG. 37.

a garment, in order to set the gathers into a band or yoke or cuff, with regularity.

6. (*a*) Explain that gathers are always worked on the right side of a garment, on single material, and tell children to put the right side of their work uppermost ; (*b*) tell them that gathering should be done in a straight line and at a certain distance from the top edge of the material ; (*c*) show that a straight line can be obtained by turning down the top edge on to the right side about a quarter of an inch all the way along, and then pinch and press the calico to make a crease. (Some let children draw a thread, but this is a bad method, for the material is weakened by this) ; (*d*) let children turn down a fold of the calico at the top, and make a crease ; (*e*) illustrate this by a dotted line on slate diagram (Fig. 37).

7. *Fastening-on.*—Tell children they begin at the right-hand side, *close* to the hem, but *never on* the hem. (a) Show by a mark on the diagram, where they must fasten on, and by the frame and your own material how to fasten on, by taking up a little piece of the material and working over this two or three times with a back stitch, pulling the cotton to find out, if it is very securely fastened. (Some give children double cotton for gathering, because if one part of the thread breaks, the stitch can be continued with the single thread, but it is not a good method, because the cotton gets twisted, and, if broken, becomes entangled); (b) demonstrate again, the children fastening on at the same time.

8. *The Gathering Stitch.*—(a) Show by the Demonstration Frame and then by your own material how to work the stitch thus:—*On the Frame*, pass over four threads and take up two threads; *on the Java Canvas*, pass over a long piece, and take up on the needle half as much as you have passed over, thus making a long stitch on the right side, and a short one on the wrong side; (b) repeat the process of making the stitch, telling the children to work on the crease on their calico in the same way; (c) illustrate the appearance of the stitch (Fig. 37); and on a sectional diagram to represent the frame, the true proportions of the stitches (Fig. 42); (d) go on working with the class, illustrating on the slate and examining, till the opposite side is reached; (e) tell children they must leave off, when they reach the hem; (f) show them how to draw up the material by gently pulling the gathering cotton, and working the material back to the right with the right hand, then take the needle off the cotton; (g) give the children a pin and show by the frame, needle and cord, your own work, and an illustration on the slate (Fig. 38) how

to put the pin in the work, and wind the gathering cotton round it.

N.B.—The gathers must not be drawn up too tightly at first.

9. Illustrate the appearance of material, when narrowed at the top (Fig. 38).

10. Show children that the long stitches on the right side make the gathers on the wrong side, and the short stitches on the wrong side make the gathers on the right

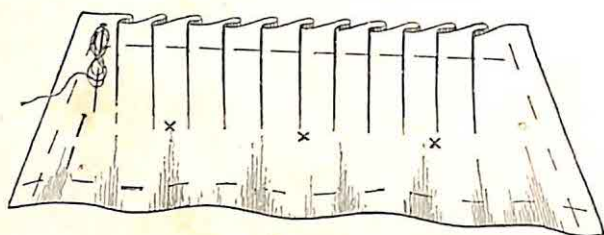


FIG. 38.

side, so that the wrong side gathers are twice the size of the right side.

N.B.—1. Fresh gathering cotton should be fastened on at the divisions of the garment, and twisted round pins, when the work is drawn up.

2. The material to be gathered should be twice (or a little more) the length of the band, into which it is to be fixed. This rule cannot always be carried into effect, but it is always better to have gathers full, than scanty.

3. Gathers are made on double material, sometimes, for instance, at the back part of a gown, under-petticoat, and baby's robe, and all round the waist of children's muslin frocks.

11. *Stroking*.—(a) Show that the result of drawing up the gathering cotton is to form folds, called gathers, and that these are all uneven, and need to be arranged in regular order by stroking them down, before they are set into the band; (b) show the children that the stroking

must be done on the right side of the garment, at first below the gathering thread, and then above it, beginning always at the left-hand side; (c) show how to lift up each gather without scratching or scraping the material, with the point of the pin, or eye of the needle, and push it under the left thumb, moving the thumb up and down on the gather, till it is flattened or smoothed to the depth which you want (say from a quarter to a half inch below the gathering cotton); (d) when the gathers below the gathering thread are completely stroked, take out the pin, draw up the gathers more tightly, twist the cotton round the pin and re-stroke; (e) show the children how to turn the work round, and stroke the gathers above the gathering cotton, explaining that these must be as regular and flat as those below, or they will not set well under the band; (f) examine the children's stroking and give individual help, where necessary.

° *N.B.*—Explain that scratching or scraping the material leaves ugly marks, and not only spoils the appearance, but often weakens and breaks the threads of the material. Stroking needs to be well done. All the gathers should go up and down in straight lines after being stroked.

12. *Making the Band.*—(a) Recapitulate the way of finding the selvedge and the fixing as described in making a band (Fig. 27). Tack the top folded edge and two ends, seaming the latter before fixing the band to the garment; (b) show children how to divide the band into halves and quarters, and mark the divisions by a few cross stitches on the wrong side (Figs. 39 and 40); (c) explain that this is done to match the divisions in the garment, and to help to set in the gathers regularly.

13. *Fixing the Band to the Garment.*—(a) Show how to take out the pin or pins, and move the gathers along the gathering cotton from right to left, till the garment is the

same length as the band; (b) show very clearly how to place the garment between the bottom edges of the band, matching the halves and quarters, and putting in pins at these divisions, and at each end of the band, where great care is needed to prevent the hems being rolled into hard lumps. (Some do not top-sew the ends of the band, till the gathers have been set in, because the hems on the

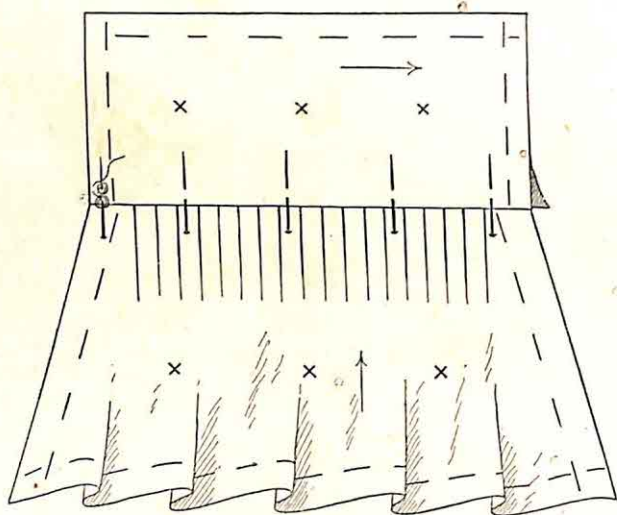


FIG. 39.

sides of the garment can be fixed more easily); (c) show children how to regulate the gathers, while placing the band, and point out that the band must lie on the gathering cotton in as straight a line as possible; (d) show children how to tack the edge of the band on to the garment, without marring the regularity of the gathers; then take out the pins.

14. *Setting-in Stitch*.—Show how to hold the work (there are several ways of doing this; the method shown

in Fig. 40 has been found the best, because the gathers

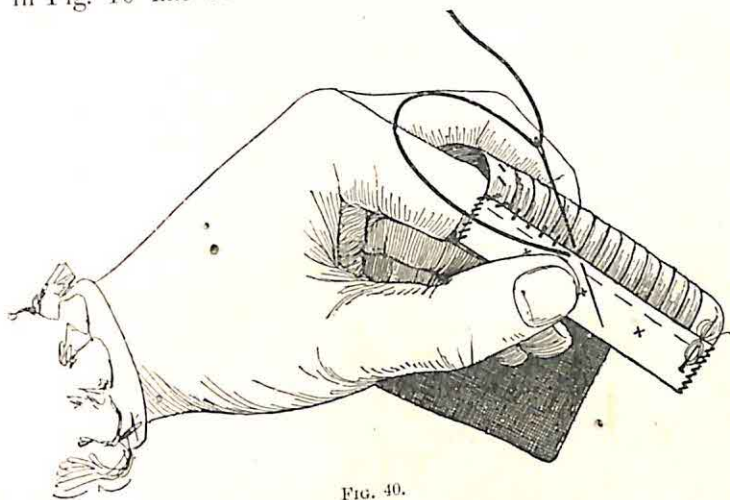


FIG. 40.

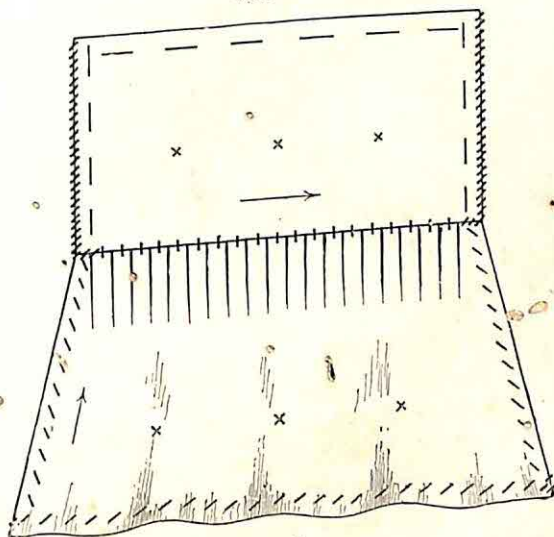


FIG. 41.

can be pulled down straight from the band, and the

setting-in stitches can be kept the same in shape all along) either (1) with the garment over the left forefinger quite straight as for seaming, the edge of the band resting on the forefinger, and the left thumb close to the edge of the band; or (2) the band being placed over the left forefinger as for hemming; or (3) partly like hemming and seaming. Show children by the Demonstration Frame how to make the stitch. The fold at the top of the frame represents the band, and two strands of tape below, one gather.

(a) Fastening on is the same as for hemming, because the right-hand end of the band must be hemmed to the

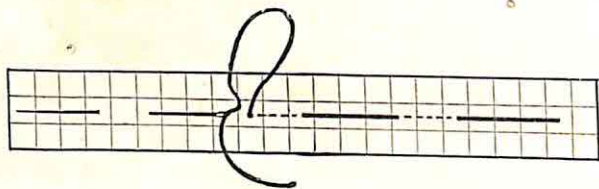


FIG. 42.

hem on the garment, so at first the children must hold the band in the same way as they would for hemming; (b) when the first gather is reached, tell the class to watch you, while you work the stitch on the frame thus:—the cotton is coming out on the fold or band, place the needle in the hole below the edge of the fold, and then in a slanting direction forward under two strands of tape, and bring it out on the fold, one strand above the edge, then show children that a straight stitch has been made on the right side, and a slanting one on the wrong side; (c) illustrate on a sectional diagram to represent the frame thus: put a chalk mark in a space between two selvedge lines, and mark it No. 1, then count down two lines and put another mark and call it No. 2, count to the

left two lines, and two lines up, and put a mark and call it No. 3; draw a straight line from Nos. 1 to 2, and dot a slanting line from Nos. 2 to 3 (Fig. 43). Elicit that *setting-in* stitch is the reverse of *seaming* stitch. (d) Show how to work the stitch by the frame and sectional diagram, till they understand how to do it (let the children practise the setting-in stitch on canvas before they work it on calico). Then use the Paragon, or a larger specimen than the children's, to show how each gather must be lifted up to the edge of the band, the cotton being drawn down straight from the band, and the needle placed in a

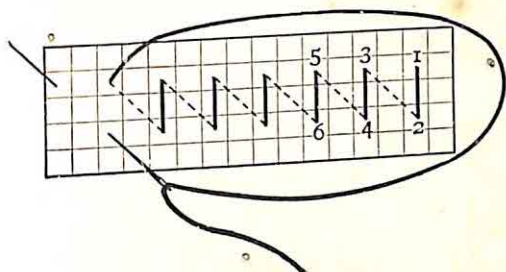


FIG. 43.

slanting direction well under each gather; (e) try to make the children see that by placing the needle well under the gathers, they are increasing the size of those on the right side, and lessening the size of those on the wrong side, so that when the setting-in is finished on both right and wrong sides, the gathers will be equal in size; (f) when the end of the right side is reached, fasten off the gathering cotton on the garment underneath the band, hemming the end of the band on to the hem of the garment, and then turn the work round to the wrong side; (g) show how to tack the wrong side of the band most carefully and evenly over the gathering cotton, and slanting

setting-in stitches, and recapitulate the whole method, as given for the right side of garment (Figs. 40 and 41).

N.B.—Point out that the band on the wrong side must not be taken above the gathering cotton, and never below it, or the band will be puckered, and the gathers on the right side will be displaced and tightened.

CHAPTER VII

FLANNEL PATCHING—CORNERS IN HERRING-BONE STITCH

FLANNEL PATCHING (*Fixing*)

Class.—Girls.

Apparatus.—*For the Teacher.*—Two pieces of coloured flannel, one much larger than the other, scissors, needle and white tacking cotton, a torn flannel petticoat, or vest, or drawers, or shirt, or bodice, or infant's nightgown, also a patched flannel garment, pins.

For the Children.—Two pieces of coloured flannel, needle and white tacking cotton, pins, scissors.

N.B.—In the first lesson the shape of the patch should be a square, or an oblong.

Method.—1. (*a*) Draw an illustration on the slate to represent a garment worn into a hole, and another to represent the patch; (*b*) explain that patching is repairing or mending a garment, which is either worn very thin, or into a hole, or which has been accidentally torn. Show a garment, which is too much strained to be darned, and another with a hole, and tell children these must be mended by means of a patch of material of the same colour and age, so that they may last some time longer. Tell

them that patching, like darning, helps to make people thrifty.

2. (a) Tell children they are going to learn how to fix a patch on flannel or some other woollen material at first, with two pieces from a worn-out petticoat, or entirely new material (new material is supplied by the London and other School Boards); (b) show them how to fold the larger piece diagonally, and then cut a hole in the centre; (c) show how to find the selvedge of the garment (in a real garment this goes from top to bottom), the selvedge in flannel can easily be detected, because it stretches little in comparison with the woof, and the threads do not form so deep a fringe when torn; (d) tell children to place the garment on desk with the selvedge side going up and down; (e) show children the difference between the right and wrong sides by turning back one corner of the material and comparing the surfaces; tell them the surface with the thickest woolly substance, which is called the *nap* or *ply*, is the right side, and the side which is bare of nap, and with the threads more distinct, is the wrong side.

N.B.—Write the word *nap* or *ply* on the slate, and explain the meaning of whichever word you use.

(f) Tell children to place the garment with the right side uppermost, and selvedges going up and down, then show them that the nap can be rubbed up the wrong way, and that when this is done the surface of the material is rough looking, but when the nap is rubbed down the right way it is flat and smooth and nicer to the touch; (g) explain that the nap of flannel and other woollen materials must always go downwards with the selvedge, because the material will wear and keep clean longer than if the nap is placed upwards. The material is worn thin in a short

time, and catches the dirt more quickly, if the nap is placed the wrong way.

3. Examine to see that children have found (1) the selvedge; (2) the right side; (3) the way of the nap; and (4) that the garment piece is lying on the desk with right side uppermost, and the nap going down from them with the selvedge.

4. (a) Show children how to tack the left-hand side of garment near a selvedge edge, the knot of cotton being at the bottom, showing the nap is falling towards it; (b) illustrate, and write these three important details on the slate.

N.B.—A tacking thread is better than a pin, because it does not work out.

5. (a) Tell children to take up the patch and to find (1) the selvedge; (2) the right side; and (3) the way of the nap; (b) examine to see that they have found all correctly; (c) show how to tack one side near the edge like the garment; (d) examine children's patch; (e) compare the size of the patch with the size of the hole, and explain that in an actual garment there are sure to be thin places round the hole on all sides, and therefore a patch must always be an inch or two larger than the hole, or the garment will break away from the sides of the patch; (f) show children how to turn the garment over, so that the wrong side is uppermost, the tacking to the right-hand side, and the knot at the bottom.

6. *Placing the Patch on the Garment.*—(a) Show children how to place the right side of the patch to the wrong side of the garment, matching the selvedges and the way of the nap (the tacking being on the right-hand side and knot at the bottom), and letting the centre of the patch lie over the hole; (b) show how to hold the garment up to the

light to see if the patch is well over the hole on all sides, and that it is quite evenly placed. (This part is very important, and in addition to demonstrating collectively, it will be wise to give individual attention, before tacking the patch on to the garment; (c) show how to press the patch down with the right hand, so that it adheres closely to the garment; (d) show how to tack the patch to the garment, beginning at the left-hand selvedge side, five threads from the raw edge; (e) illustrate on the slate the hole covered and the patch tacked; (f) elicit by questioning that the wrong side of garment and patch is uppermost, that the hole is well covered, and that the knots of the tacking cotton are hidden.

7. (a) Tell children to turn work over, so that the hole can be seen; (b) illustrate on slate; (c) elicit that the right side of patch can be seen through the hole; (d) show children by the illustration, and then by your own specimen, that it is necessary to cut away all the jagged edges of the hole, and the thin parts round it, and elicit that in so doing the hole is made larger and the same shape as the patch: (e) draw diagonal lines from the hole of illustration towards each corner of the patch, to show how far the worn part must be cut away. (This is the most difficult part of the fixing, because children are apt to cut away either too much or too little.) A sufficient depth of the garment must be left lying on the patch, so that there may be a space between the herring-bone stitches, on the right and wrong sides; (f) show by your own specimen how to cut up towards one corner to within eight or nine threads of the tacking cotton, then let children cut up to one corner of their work; (g) demonstrate till children have cut up to all four corners, then show them how to cut away all the torn and worn parts in straight lines,

true to a thread, the children doing the same on their work; (h) illustrate on the slate; (i) examine work; (j) show how to press the garment to the patch, and tack it five threads above the edges.

N.B.—(1) The tacking stitches on flannel should be very neatly done. (2) The garment must be fastened to the patch on the right side by herring-bone stitch first, then the patch to the garment. (Some prefer fixing and herring-boning the wrong side first.) (3) Great care is needed in fixing to prevent the patch from being put on too tightly or too loosely. (4) Recapitulate the herring-bone stitch by frame and chequered board; and if the girls have not been taught the corners before, teach them these on canvas at first, and then on the flannel patch.

TO HERRING-BONE THE CORNERS

Class.—Girls.

Apparatus.—*For the Teacher.*—A fixed patch, needle and sewing cotton, Demonstration Frame with corner attached, slate and chalks.

For the Children.—A fixed patch of coloured flannel, needle and white sewing cotton (or coloured cotton if white flannel), to help the children to see if the stitches are all distinct and regular.

Method.—1. (a) Recapitulate by the Demonstration Frame, illustration on slate, and your own specimen, how to begin the herring-bone stitch on the flannel; (b) show children how to fasten on the cotton in the middle of a selvedge side on the right side of the garment, either by weaving the needle over and under a thread as high as four threads from the raw edge, or by slipping the needle under the garment, and bringing it out four threads high, and tucking the end of the cotton under the fold; (c) go on demonstrating and illustrating on sectional diagram the

herring-bone stitch, in the same way as given in a previous lesson, being careful to see that children take their needles through the double material at the top, and through single material just below the raw edge.

2. *The Inner Corner.*—(a) When the corner is reached the cotton must be coming out at the top from the last stitch (the children should be taught the corners on canvas before they work them on flannel); let children

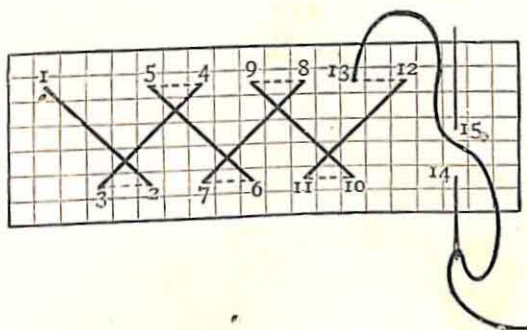


FIG. 44.—INNER CORNER.

count down four threads with you, and four to the right, and then show by frame how to put the needle under two threads of the double material vertically, the eye of the needle being downwards, then draw it out, and turn the work round; count down four threads and to the right four threads, and put the needle under two threads of single material horizontally; (b) illustrate on sectional diagram the position of the needle, examine. The children can go on working the stitches without any demonstration on frame, while you illustrate one side of stitches on slate (Fig. 45); (c) when the second corner is reached, show by the frame again, how to put the needle under two

threads vertically, as before. Repeat this till the garment is herring-boned to the patch, and all the *inner* corners are completed.

To Fasten Off.—Show children how to weave the needle

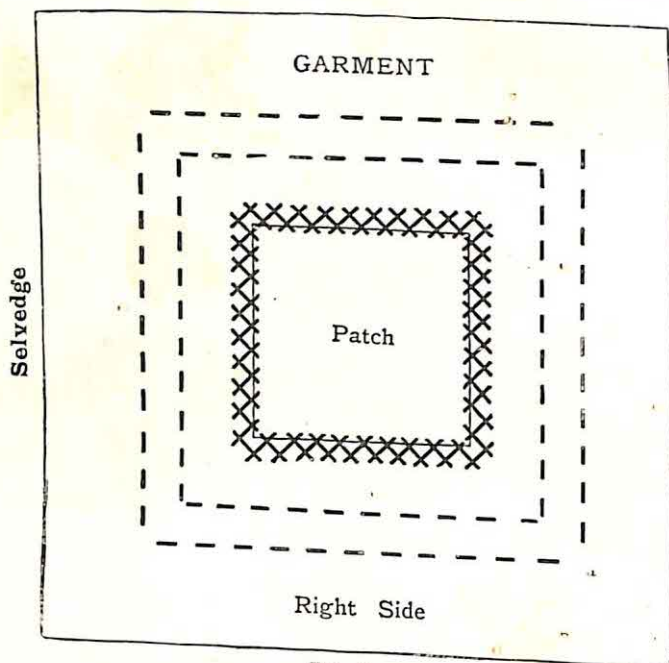


FIG. 45.

under the crosses at the top, and work over the last stitch as for stitching.

3. *The Outer Corners.*—(a) Show how to fasten on in the middle of a selvedge side, and recapitulate the stitch, as before; (b) when the corner is reached, the cotton must be coming out of the last stitch at the bottom, on the single material; (c) show by the frame how to count up four threads and to the right four threads, and put the

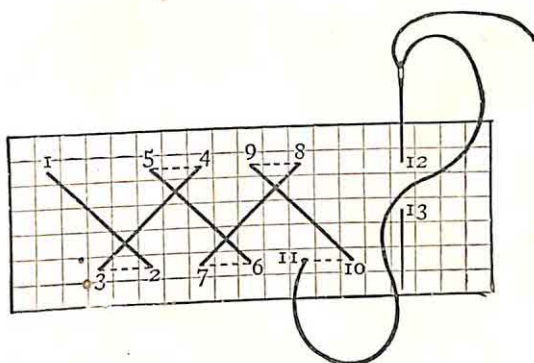


FIG. 46. - OUTER CORNER.

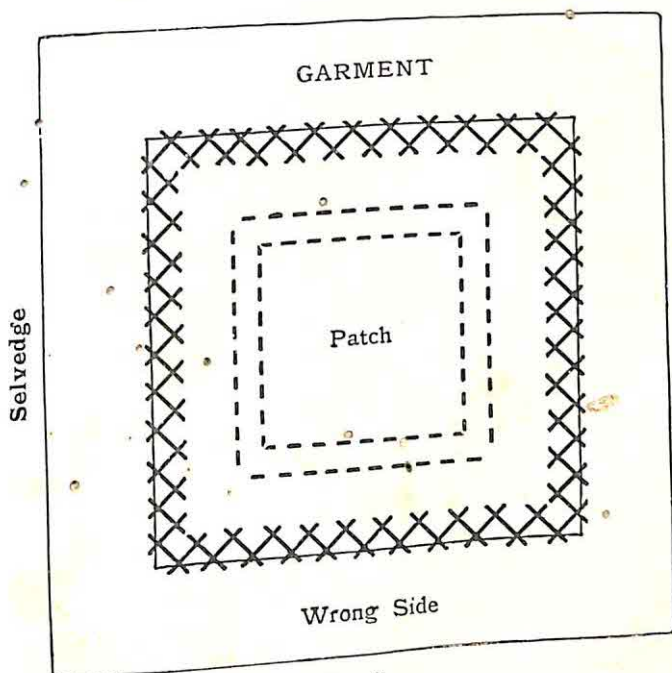


FIG. 47.

needle under two threads of single material vertically, the eye of the needle being upwards; draw the needle out, and turn the work round; (*d*) illustrate the position of needle at outer corner (Fig. 46). Let children go on working this side of the patch, while you illustrate the appearance of stitches on the slate (Fig. 47). Examine children's work frequently. Demonstrate by frame and slate every corner, till all are finished, and then fasten off, as before.

Notes.—1. The fastening-on stitch is always a half one, but in herring-boning a square, oblong, or triangular patch, this half stitch is always finished, before fastening off.

2. The herring-bone stitch is worked on the right and wrong sides in patching, and the stitches on the reverse sides should be quite clear and distinct, to make the patching strong, and lasting.

3. It sometimes happens that the rule of taking two threads on the needle must be ignored, when near a corner, in order to turn the corner accurately, and to get the next side four threads high.

CHAPTER VIII

BUTTONS AND BUTTONHOLES

SEWING ON AN UNPIERCED LINEN BUTTON

Class.—Girls' School.

Apparatus.—*For the Teacher.*—A band of very coarse calico, and a very large unpierced linen button, needle and coloured sewing cotton, slate and chalks, specimens of pierced pearl, bone, metal, and linen buttons, unpierced flannel, holland, and fancy dress buttons with and without

shanks, and various garments with different kinds of buttons securely sewn on.

For the Children.—A calico band already fixed by themselves, an unpierced linen button of moderate size, needle and coloured sewing cotton.

Method.—1. Draw an illustration of the band and the button (Figs. 48 and 49).

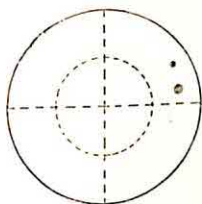


FIG. 48.

2. (a) Show by the finished garments that buttons and buttonholes are used to fasten certain parts of clothing; (b) that garments can be more easily fastened by buttons than by tape

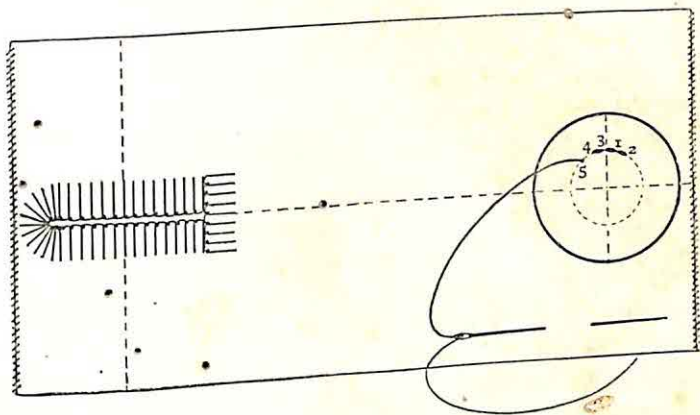


FIG. 49.

strings, which take time to tie; (c) that buttons are always sewn on double material, and on the right side of the garment, with the right side of the button uppermost.

3. (a) Show children how to fold the band into halves across its length, and crease it well: then open it and fold the right or left hand end in about a quarter or half an

inch or more, according to the size of the button; (*b*) illustrate the creases on the band (Fig. 49); (*c*) explain that these creases are guides for placing the button in the middle of the band, and at the right distance from the end. (Buttons should not be placed, if it can possibly be avoided, quite close to the edge of the band, because it is always better to allow some portion of the material to lie under the buttonhole (illustrate by a dress bodice). Examine, to see if children have creased their bands accurately.

4. (*a*) Show that all buttons have a right and a wrong side, and that linen buttons have a join on the wrong side, and are covered with calico, instead of linen, that pearl buttons, etc., are rough and unfinished on the wrong side; (*b*) explain that linen, holland, and flannel buttons have metal rims, and that the material is folded more than once over this rim, so that buttons are said to be made of twofold, threefold, and fourfold linen, etc., and are dearer in price, according to the number of folds, on the right side.

5. (*a*) Tell children to hold the right side of the button towards them, and then show them how to find its centre, by drawing the eye of the needle from the top to the bottom, vertically, and then across it, horizontally; (*b*) explain that where these lines intersect each other is the centre of the button. (The holes made to attach buttons to the card on which they are sold are not always in the centre, but may be so by accident.)

6. Illustrate the diameters of the button by dotted lines (Fig. 48), and examine children's buttons, to see if they have distinctly marked them, without scratching the linen.

7. (*a*) Explain that the linen button must be fastened

to the band very securely by stitching, which at the same time will ornament its surface, and that stitching is more regularly done, if it follows the circle of the metal rim, but it must not be worked close to the rim; (b) show the children how to hold the button up to the light, with right side towards them, and mark a circle with the eye of the needle, half-way between the outer rim and the centre. (Some let children prick holes with the point of the needle, others let them draw a circle with lead pencil.) Illustrate the circle (Fig. 48).

N.B.—The marking of the circle is a difficult process for children, and needs much practice to be done perfectly. Examine children's buttons, to see if the circle is distinct, well formed, and the right distance from the outer edge.

8. *Fastening on the Sewing Cotton.*—(a) Show by your own calico band how to fasten the cotton on by working over a small piece of the material, two or three times, a little distance from where the lines on it intersect each other; (b) put a chalk mark on slate illustration to show the exact place. Examine to see if children have fastened on securely and correctly on the right side of the band.

9. (a) Show children how to bring the needle from the wrong to the right side of the button, somewhere on the circle, and then show by the Demonstration Frame or your calico band how to put the needle back two or three threads, and push it through the button and the band, and draw it out gently and loosely to the wrong side; (b) illustrate the stitch on the button, marking the place where the cotton first came out No. 1, and the place where the needle was put in to form the stitch No. 2 (Fig. 49). Examine children's work; (c) show how to put the needle through the wrong side of the band, and bring it out on the circle, either two or three threads

above or below the first stitch, then how to put the needle back close to the stitch already made, and above or below the cotton at the back, as in ordinary stitching, and draw the needle out as before; (d) illustrate and examine; (e) explain that stitching on the surface of the button must be neat and regular, and on the wrong side must be cord-like, as in ordinary stitching; (f) go on demonstrating, illustrating, and examining, till children are ready to make the last stitch, then show them how to put the needle back to touch the last stitch, and bring it out between the button and the band; (g) explain (1) that the stitching which is loose on the surface of the button must be tightened, and (2) the cotton lying between the button and the band must be protected from the friction of the buttonhole, and (3) that the button must be raised, and all three by means of a hand-made stem or shank of cotton.

10.—*Stemming the Button*.—(a) Show a button with a shank, and elicit that this kind of button is raised, and so gives a buttonhole plenty of space to rest on underneath it, but linen and other buttons without shanks must always be raised by *stemming* with cotton or linen thread, or silk to match the material upon which they are being sewn; (b) show children how to stem by winding the cotton four or more times round the button rather tightly; (c) when they have stemmed it, examine to see if correctly done, and then show how to fasten off, on the right side of the band, under the button, and break the cotton.

Notes.—1. All buttons, whether pierced or unpierced, should be stemmed by rings of cotton, if they have no shanks, when bought.

2. If the metal rim to the button is narrow, then the circle of stitching on it must be half-way between the outer edge and

the centre, but if broad, the stitching may be worked close to the rim, so that a sufficient space is left for the buttonhole to lie quite flat under it.

3. There must not be a deep pit on the wrong side of the band, underneath the button. This pit is caused by stitching and stemming the button too tightly, which, in addition, puckers the band.

4. A circle of stitching quite close to the narrow rim of a button is incorrect.

5. Pierced buttons must be fastened to a garment by means of the two, three, or four holes on them, by stitches passed through the holes and forming sometimes straight stitches and sometimes crosses or triangles. Bone, metal and pearl buttons used on men's and boys' clothing must be very strongly fastened and stemmed (Fig. 50).

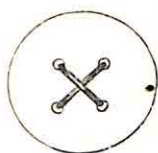


FIG. 50.

6. Linen buttons may be fastened to a band by long stitches to and from the centre to the made circle, thus forming a star. This method is only suitable for small buttons on baby-linen (Fig. 51).

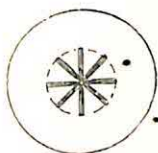


FIG. 51.

7. If a button is required for a pinafore, etc., where there is no hem, a piece of tape or calico must be placed on the wrong side of the garment, to form double material, for if buttons are sewn on single material, they cause it to break away into holes.

8. Some people mark a star on the surface of the button, and stitch the rays to and from the centre to the inner circle, then stem it. This is a very strong method.

BUTTONHOLE STITCH (FIRST LESSON)

Class.—Older girls.

Apparatus.—*For the Teacher.*—Open Demonstration Frame, slate, chalks, a square of lined canvas, needle and

coloured embroidery cotton, finished specimens of button-holes on garments.

For the Children.—A square of lined canvas, needle and coloured embroidery cotton, thimbles.

Aim of Lesson.—To teach the stitch on canvas, only.

Method.—1. (a) Show by the garments that button-holes are needed to fit buttons, so as to fasten clothing properly; if the holes are too small for the size of the button, they are useless; if too large, they are untidy and liable to slip off the buttons; (b) that button-holes are always worked on the right side of double material, sometimes at the right-hand side of the garment and sometimes at the left, *e.g.* in chemises and shirts; (c) that they are cut on the selvedge, the woof, and the cross of the material; (d) draw an illustration of a band with a button on it at one end, and a slit on the other end to show the use of it; (e) let children draw out two threads of the canvas to represent the hole; (f) tell them to hold the work over the left forefinger, like for setting-in gathers, and fasten on at the left-hand side. (This stitch is worked from left to right, like herring-boning.)

2. *Fastening on.*—(a) Show children by the frame how to weave the needle and cotton under and over four threads, on the right side, above the space made by the drawn threads; (b) let the children weave the needle under and over the material in the same way; (c) then draw the needle and cotton out, leaving a very short end, which will be covered by the last stitch of the opposite side of the slit, and also worked over, when bracing the end.

N.B.—The advantage of this method is that the stitch is taught directly, whereas in the method given in Note 1, the first stitch is the fastening on.

3. *The Stitch.*—(a) Show how to put the needle into the space immediately below the fastening-on cotton, in a vertical direction under four threads, keeping the fastening-on cotton behind the eye of the needle, and putting the cotton coming from the eye of the needle round its point from left to right, then drawing the needle out and up to the top, rather loosely, making a knot. Repeat this, letting children work with you, then examine; (b) let the children see that two straight upright stitches are made, covering four threads, both on the right and wrong sides; (c) illustrate on the sectional diagram thus:—

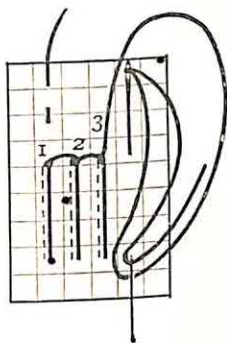


FIG. 52.

put a mark in a space between two lines and call it No. 1, count down four lines and mark a dotted line to represent the stitch on the wrong side, then put a thick chalk line to represent the stitch on the right side, with a knot at the top of it (Fig. 52); (d) explain that the knots of the buttonhole stitches protect the raw edges of the material, when cut to form a buttonhole, and that these knots require room to lie flat and in regular order, so a thread must be left between each stitch on coarse material, and two threads on fine. (The buttonhole stitches should never be too far apart, or the hole has a ragged unfinished appearance, and is not firm and durable.)

4. (a) Show children how to put the cotton, coming from the knot back over the left hand, that it may lie behind the needle; (b) then how to put the needle into the lining at the back of the canvas, one thread to the right of the last stitch, under four threads vertically as before, and bring the cotton from the eye of the needle and place it round the

point from left to right, draw the needle out and up to the top rather loosely, making a knot; (c) elicit that two stitches are made at the same time, one on the right and one on the wrong side; that the knots are only seen on the right side of the work (this can be clearly shown by the frame); that one thread is left between two stitches; that the stitches must not be drawn tightly; (d) explain that if the stitches are drawn up to the raw edges of the slit too tightly, when working on calico or other material, the edges are apt to be rolled over to the wrong side, giving a ragged appearance, and also making the slit hard at the edges. Buttonholes should be firm, but the stitches should all lie flat and even as well; (e) illustrate the second stitch on the sectional diagram (Fig. 52); (f) demonstrate on the frame, illustrate on the slate, and question, till children can work the stitch without assistance; examine frequently, and give individual attention where it is required.

Notes.—1. Another method of fastening on at the folded edge of the Frame is as follows:—put the needle in between two threads, and bring it out under four threads, vertically, draw the needle through, holding a short end of the cotton with the left hand, and then show the class how to put the needle under this cotton from left to right, to form a half knot, like the first part of tying a string. The class must do the same on the space made by the drawn threads, putting the short end of cotton under the left second finger, and then putting the needle under this end from left to right.

2. If the cotton coming from the last stitch is allowed to fall in front of the needle, instead of behind it, no knot is made at the top edge, and if the cotton from the eye of needle is put round the point from right to left, only a half knot is the result.

3. Children should be allowed to practise the stitch on canvas, and should learn all parts of the buttonhole, before they apply the stitch to a slit on calico.

THE CORNERS OF BUTTONHOLES

*Round Corners**A. Seven Stitches with Knots*

Class.—Older Girls.

Apparatus.—*For Teacher and Children.*—The same as in the previous lesson on buttonhole stitch.

Method.—1. (a) Show children specimens of buttonholes, either with both corners rounded or braced, or with one corner rounded and the other braced; (b) tell children they have to learn how to work a buttonhole with one corner rounded and the other braced; (c) explain that the rounded corner is always worked at that end of the buttonhole nearest the edge of the band, because it lies flatter under the button than the braced end; (d) tell children that the rounded corner can either be made by seven stitches with knots, or nine stitches without knots; that the corner made of knotted stitches is unquestionably the stronger of the two, and if the stitches are worked with regular spaces between them, it will set as well under the button as the corner made of nine stitches, without knots.

2. Show by the Demonstration Frame how to make the corner, the children working with you on their canvas samplers, thus:—(a) put the needle under four threads, and one thread to the right of the last stitch, and put the cotton coming from the eye of the needle round the point from left to right, draw the needle out and upwards, thus forming a knotted stitch; (b) illustrate on sectional diagram (Fig. 53), and mark this stitch No. 1; examine children's work; (c) put the needle back into the same hole and bring it out two threads to the right of No. 1,

show how to put the needle back into the same space, and bring it out one thread to the right and one thread higher up, thus making second stitch on right side and third stitch on wrong side, the children working with you; (g) recapitulate by diagram as before (Fig. 54), and examine; (h) show again how to put the needle into the same space, and bring it out one thread to the right and one thread higher up, thus making the third stitch on the right side and the fourth on the wrong side; (i) recapitulate by diagram as before (Fig. 54). The first set of these stitches is now finished, and the children will see they have made the first stitch on the wrong side of the second three.

3. *Second Set of Three Stitches.*—(a) Show how to put needle back into same space, and bring it out one thread deeper than No. 3, thus forming the fourth stitch and the wrong side of No. 5; (b) recapitulate by diagram as before (Fig. 54); (c) show how to work the fifth stitch, letting children see that this stitch is in the same direction as the slit would be, and that it is quite straight; (d) recapitulate by diagram (Fig. 54); (e) show how to work the sixth stitch, which is like the fourth and fifth, in being one thread to the right and four threads deep; (f) recapitulate as before, the children working each stitch with you.

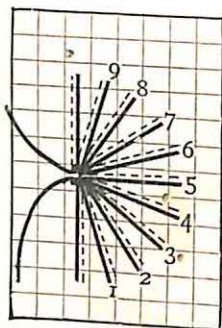


FIG. 54.

4. *The Third Set of Stitches.*—(a) Show by frame and slate how to make the seventh and eighth stitches, which are worked in the same way as the third and second; (b) show by frame how to make the ninth stitch without a knot, and the first stitch of the second side of hole with a

knot, thus :—put the needle back into the same space and bring it out one thread to the right and four threads deep, then bring the cotton coming from the eye of the needle round the point from left to right, and draw the needle out and up, so forming two stitches at the same time ; (c) recapitulate by diagram as before (Fig. 54) ; (d) let children go on working the second side of hole, and examine their work frequently.

N.B.—This corner is called the *eyeclet-hole*, and is a quick and easy way of rounding the end of a buttonhole, but it is not strong and lasting, for the friction of the button often breaks the cotton, and then increases the length of the slit.

C. The Braced Corner of Buttonholes

(Eight or nine knotted stitches)

Method.—1. (a) When children have completed the second side of the hole, show by the Frame or Paragon how to finish off the inner end by *barring* or *bracing* it, i.e. sewing over the first and last stitches from side to side, two or three times to draw the sides of hole closer together (without puckering) and to give greater strength, being careful to hide the fastening-on end of cotton ; (b) show children how to begin at the left-hand side, by putting the needle in above the strands of cotton close to the bottom edge of the side stitches, and bring it out four threads deep, proceeding in the usual way to make a knotted stitch, and pulling the cotton upwards towards the hole, then let children make a stitch ; (c) recapitulate by drawing the appearance on the sectional diagram (Fig. 53). Examine children's work ; (d) show again by the frame how to make each succeeding stitch, leaving one thread between each, and being careful that the fifth stitch

is in the same direction as the hole, and that the last stitch is worked on the bottom edge of the first side stitch; (e) illustrate on sectional diagram, after every stitch has been worked on the frame, and examine children's work frequently, to see if the stitches have been taken quite through the double material, and that they are four threads deep, on the wrong as well as on the right side.

2. *Fastening off*.—Show children how to bring the needle through to the wrong side, and weave it under and over the buttonhole stitches through the single material, and fasten off by a back stitch or two.

N.B.—When children can work all the parts accurately on canvas, they should be taught how to cut a hole, to apply the stitch, and to manage the corners on calico.

THE BUTTONHOLE ON CALICO

Class.—Girls' School.

Apparatus.—*For the Teacher.*—A band of coarse calico or holland, with a button sewn on, at one end; scissors or penknife, needle, and coloured sewing cotton, slate and chalks.

For the Children.—A calico band, with a button sewn on, scissors or penknife, needle, and coloured sewing cotton.

Method.—1. *Cutting the Hole.*—(a) Show children how to crease the band in half across its length, so that the hole may be cut exactly in the middle, and opposite the button, then place the button on this crease, inside the turnings at the end of the band, and put a mark with the point of the scissors or penknife on either side of the button to measure its width across, explaining that a buttonhole must always

be the same size as the width across the button, allowing a thread or two at each end, in addition, for the corners; (b) illustrate the band on the slate (Fig. 49); (c) show children how to fold in the end of the band, till the two marks meet, and then how to cut the hole on the crease through the fourfold material, a thread or two beyond the mark; (d) *or*, how to cut the hole with a penknife by spreading out the band quite flat, even, and smooth, on some hard substance, *e.g.* the wooden desk or a stone letterpress, and drawing the knife along the crease, in a perfectly straight line, and cutting quite through the double material; (e) examine children's work, when they have cut their slits; (f) illustrate the slit on slate (Fig. 49).

N.B. —1. The hole must be cut the selvedge way of the material, perfectly straight to a thread. The children should never be allowed to work a hole that has been cut unevenly. As this is a difficult process to some children, they should be allowed to practise the cutting of holes on scraps of waste calico, first of all.

2. Older girls should learn how to cut holes on the cross, as well as on the selvedge and woof, because buttonholes are needed for all these ways of the material; beginners should cut and work the selvedge way only.

2. *Working the Hole on Calico.*—(a) Show children how to hold the work, so as to get the round corner, in the correct position at the end of the band: if the button is sewn on the right-hand end of band, then the band must be held with the folded edge towards the worker; but if the button is sewn on the left-hand end, the fixed edges of the band must be held towards the worker; (b) show by a mark on the slate illustration where the children must begin; (c) recapitulate the fastening on, as given in the first lesson on the stitch, and show children by your own larger specimen of a band, how to put the needle in the

hole (and not between the edges of the folded material), and bring it out between two threads of the calico four threads deep, and recapitulate the process of making the stitch, being careful to draw the cotton up to the hole, tightly, without puckering or rolling the cut edges; (*d*) illustrate the stitches on the hole of band and sectional diagram (Figs. 49 and 52); (*e*) examine children's work frequently, and question them as to the use of the knotted stitches; (*f*) when the first side of the hole is completed, and the last stitch is near the end of the slit, recapitulate the method of working the round corner, either with or without knots, telling children they must never turn the corners too soon, nor crowd the stitches too close to the end of the slit, before turning the corners: (all the stitches of the round corner, whether knotted or *eyelet-hole*, must be drawn up tightly to the cut edges, without puckering the material); (*g*) illustrate on slate as before, and examine children's work very often, helping the backward ones, either by individual attention, or by forming them into a separate class, and teaching collectively as at first; (*h*) let children work the second side, and then recapitulate the method of making the braced end, as given in a previous lesson, and illustrate the completed button-hole on the band (Fig. 49).

Notes.—1. Buttonholes should be very firm and neat, and should not be ragged-looking, either on the right or wrong sides.

2. Some let children overcast the edges, before working the buttonhole stitches, and others allow them to fasten the double material together, just below the cut edges, by running stitches.

CHAPTER IX

PATCHING CALICO AND LINEN—DARNING A HOLE IN
STOCKING-WEB MATERIAL

PATCHING CALICO AND LINEN

A

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Two pieces of very coarse calico or holland, the larger piece having a hole to represent the torn garment, the smaller piece being the patch, needle, coloured tacking and sewing cotton, pins, slate and chalks, Demonstration Frame with fell attached, a torn garment and a patched one.

For the Class.—Two pieces of coarse calico or holland, needle, coloured tacking and sewing cotton, pins, small squares of lined paper on which to learn how to *mitre* corners of the patch.

Method.—1. (a) Illustrate on the slate the two pieces of material, the larger diagram with hole in the centre to

represent the garment, and the smaller the patch; (*b*) show the class the torn and worn garment and the patched one, and then elicit and explain that patching is a means of saving, because the repaired garment will last longer, and will thus prevent an outlay of money for a new one; that a patched garment is more comfortable to wear than one in holes; that patching is an art, and the power to do it well is invaluable in a home; that the patch ought to be of the same texture and age as the garment to be patched, if possible (if new material must be used, it must be washed first to soften it, and to prevent it from making a rent in the old); that it is only pretentious people who scorn patched garments, for ladies of highest rank and station employ needlewomen to repair their fine linen underclothing; (*c*) explain that the shape of the patch must depend upon the kind of hole, and the position of the worn or torn part.

N.B.—In the first lesson a square patch is the easiest to deal with in fixing and placing.

2. *Cutting the Hole.*—(*a*) Show the class how to cut a hole in the larger piece of material, to represent the actual hole in a garment, by folding the larger square diagonally from corner to corner twice, then folding the triangle in half and cutting a hole in the centre; (*b*) demonstrate again, the class working with you; (*c*) let the class open the square and hold up, that you may see a hole in the centre, and the diagonal creases; (*d*) illustrate the creases by dotted lines on the larger diagram with two different coloured chalks (Fig. 55).

3. *Finding the Selvedge.*—(*a*) Recapitulate the method of finding the selvedge by pulling, etc.; (*b*) examine to see if the class is holding the material with selvedge going up and down; (*c*) tell the class to fix a narrow hem down one

side, so as to distinguish the right from the wrong side of the garment, and then quickly tack it; (d) illustrate the tacked hem; (e) tell class to place the garment on the desk with right side uppermost, and the selvedge going up and down.

4. *Fixing the Patch.*—(a) Prove that the patch is much larger than the hole, and elicit why this must always be the case, by referring to lesson on flannel patching, where the reason was given; (b) (tell class to fix the paper square first), find the selvedge of the patch, and show class how to turn down the two selvedge sides quite half an inch in depth, then the two width sides the same depth, the class working with you; (c) then fold the square diagonally from corner to corner twice, to obtain diagonal creases and to test the fixing; (d) show them how to lift up the two folds at each corner of the patch, and press the two thumbs close to the corner to raise a figure like a bishop's mitre, let the class try to do the same, while you go in and out among them to examine (children mitre the corners of squares and oblongs in kindergarten classes); (e) explain why the corners are mitred, viz. to prevent the folds being caught in when sewing the patch to the garment; (f) tell the class to fix the calico patch in the same way as the paper one, and examine most carefully to see that the folds are turned down quite evenly, and that the corners are well flattened and mitred; (g) illustrate the diagonal creases in two different coloured chalks to match creases on garment, and the folds.

5. *Placing the Patch on the Right Side of the Garment.*—(a) Show class how to place the patch with the wrong side downwards, the selvedge of patch and selvedge of garment and the diagonal creases matching each other, and putting in pins on each diagonal to keep the patch in its place; (b)

tell the class to place their patches in proper position, and pin in the same way as you have shown them, then hold garment up to the light to see if hole is somewhere about the middle of the patch; (c) illustrate the patch covering the hole (Fig. 55); (d) show class how to tack the patch

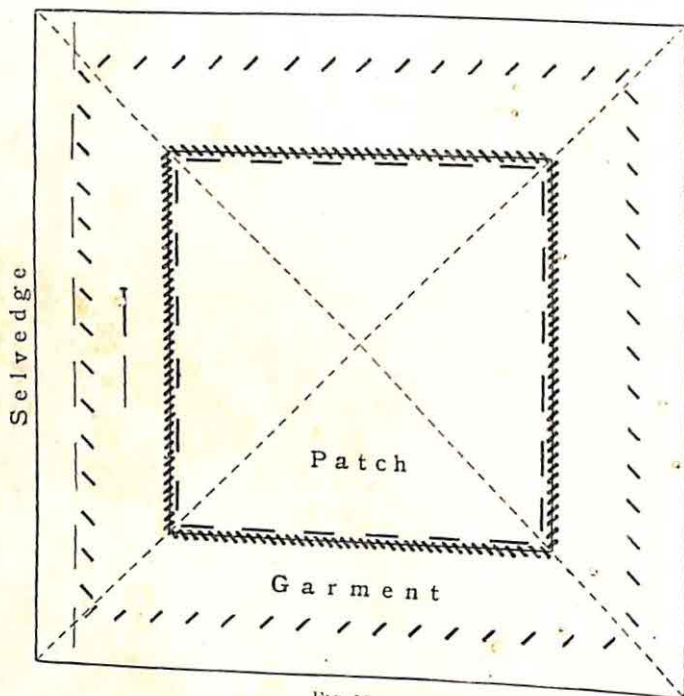


FIG. 55.

to the garment, being careful to keep it even to the threads of the garment; (e) illustrate tacking stitches (Fig. 55); (f) tell class to take out the pins, as they tack the patch down.

6. *Seaming Stitches*.—(a) Recapitulate the seaming stitch by demonstrating on the folded frame, and telling girls to work as regularly and as near the two top edges as

possible, beginning in the middle of a selvedge side, and being most particular only to sew the double material at the corners, and not to draw in any portion of the mitres ; (b) illustrate the sewing stitches on the diagram (Fig. 55).

N.B.—In this method the patch is seamed to the garment, and is held towards the worker. It is impossible to finish the fixing, till the patch is seamed on the garment. When the seaming is finished, tell class to take out the tacking threads and flatten the seams.

7. *Fixing the Wrong Side.*—(a) Turn garment to the wrong side, and show class how to cut up to each corner along the diagonals to within a quarter of an inch, put a × on each diagonal of illustration, and draw straight lines to form a square, and to indicate how much of the torn and worn part of the garment must be cut away ; (b) tell class to do the same, by cutting up to corners, and then cutting off each triangle, leaving a turning of about a quarter of an inch on all sides, to lie under the fell of the patch ; (c) show class how to draw out the turnings of the patch, and lay them over the raw edges of the garment to form fells (Fig. 56) ; (d) tell the class to do the same, while you examine, and help individually ; (e) show class how to fix the fells by turning down one fold a quarter of an inch deep, beginning with the selvedge sides, so as to keep the corners flat and in place, then the width sides, then mitre the corners, and tack the fells to the garment ; (f) tell the class to do the same, while you examine ; (g) illustrate the tacked fells, and seaming stitches on wrong side ; (h) point out that the seaming is on the inner square, and that the stronger material of the patch bears the strain of these stitches, while the outer square on the wrong side is felled to the garment, and the fells still further protect it, because they form a lining to the older material (Figs. 56 and 57).

8. *Felling Stitch*.—(a) Recapitulate by means of fell on the frame, the felling or hemming stitch, telling the class to keep the stitches regular, and to make them distinct on the right side of the work (the wide topped hemming stitch is the best for this purpose), and to be careful to fasten the corners securely as well as to keep them quite even and flat; (b) illustrate the felling stitches on

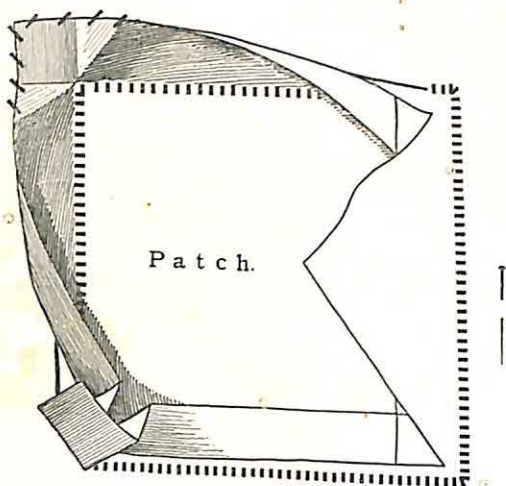


FIG. 56.

wrong and right sides (Figs. 55, 56, and 57); (c) tell class to take out tacking threads, and to press the fell with right thumb, or top of thimble.

N.B.—1. The class will see that this patch is set in with sew-and-fell seam.

2. The advantage of this method will be found in patching such materials as coloured Oxford shirting, which sometimes has a right and a wrong side, and a pattern that should be matched in patching, in the same way as print is matched, and in patching lawn, and muslin.

B

Method.—The same as in lesson *A*, as far as fixing and placing the patch.

1. *Fixing and Placing the Patch on the Wrong Side of Garment.*

—(a) Show class how to find the selvedge of the material,

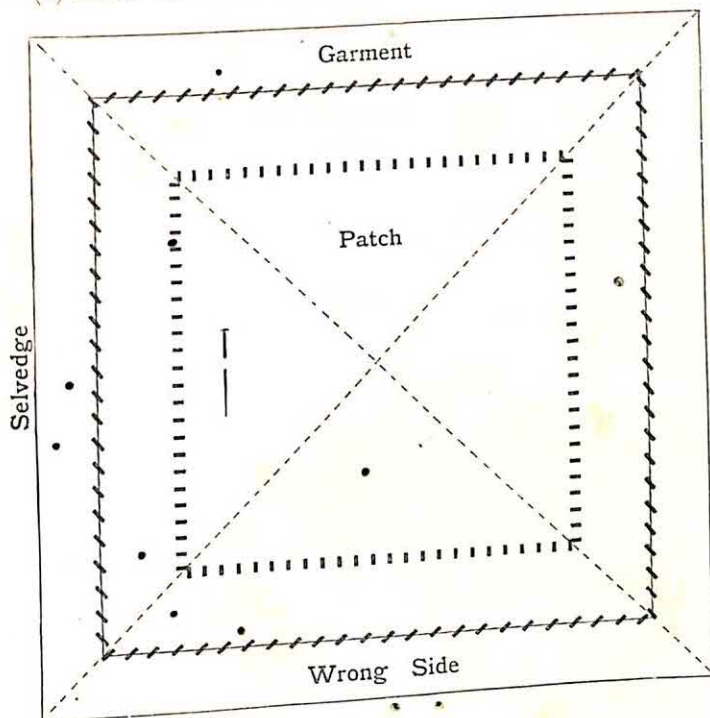


FIG. 57.

then how to fix a fold a quarter of an inch deep on all four sides (beginning with the selvedges first, for the sake of the corners), mitre the corners; (b) tell the class to fix their patches in the same way; (c) show how to fold the patch diagonally twice, the class doing the same on their patches; (d) illustrate creases and fixing; (e) tell class to

put the garment with hole in it, creased diagonally, and with fixed hem on one selvedge side, with the *wrong* side uppermost, and show them how to place the patch, so as to match the selvedges of the garment, the diagonal creases, and to get the hole, in the middle of the patch; (f) tell the class to do the same, and put pins on each diagonal to keep the patch in its place; (g) recapitulate tacking the patch to the garment close to the outer edges, and illustrate the patch placed over the hole.

2. *Fixing the Right Side.*—(a) Tell the class to turn the garment over to the right side, and show them how to cut away the torn and worn part, to within half an inch of each corner, by placing scissors in the hole and cutting along the diagonal creases as far as they think will be half an inch; (b) put crosses on diagonal lines in diagram to indicate how far; (c) tell the class to cut up each diagonal, and cut away all the worn and torn parts, even to a thread, leaving an inner square; (d) illustrate the enlarged hole; (e) point out that the hole has been made much larger, and that it is the same shape as the patch, which extends half an inch beyond it, on the wrong side; (f) show class again how to cut up towards each corner on the diagonal creases a quarter of an inch, so as to turn the raw edges under and form a fold on the garment; (g) tell the class to do the same.

N.B.—This is the most testing part of the fixing, as girls find it difficult to keep these four sides equal in depth. The difficulty can be somewhat overcome, if they are allowed to use inch card measures, and to ravel out threads from the raw edges, till the sides are quite equal.

(h) Show them how to fix these folds by turning the selvedge sides under first, then tack them quite even and flat to the patch; (i) illustrate the inner square fixed and tacked.

- N.B.*—1. By this method all the fixing can be done before the stitches are worked. The stitches are the same as in lesson *A*, that is, seaming and felling. If the patch is completely fixed, it is best to seam the inner square on the right side, first, holding the patch towards the worker, and being careful to secure the corners with an extra stitch or two, or they will be ragged. When the seaming has been flattened, turn to the wrong side, and fell the patch to the garment. If, on examining the work of the class, there is any indication of puckering, the tacking threads on the wrong side can be removed, and the fells smoothed down and re-tacked. The felling must be regular and distinct; the corners must be well secured; and the fells well pressed and flattened.
2. The result of this method is the same as in lesson *A*, that is, the patch is set in by sew-and-fell seam, and the strain of the seaming stitches is borne by the patch, which not only replaces the original material, but also forms by its fells a lining to the garment.
3. The teacher should recapitulate the seaming and felling stitches by the frame, as in lesson *A*, and illustrate step by step. Figs. 55 and 57 represent the right and wrong sides of the completed patch for both methods.
4. The best method of fixing, in patching muslin, or very old calico and linen garments, as well as sheets and tablecloths, is by *counter felling*.

DARNING A HOLE IN STOCKING-WEB MATERIAL

A. COARSE STOCKING-WEB

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—The knitting-frame, as described in lesson on darning a thin place, a piece of very coarse knitted or woven web, suitable darning-needle and coloured knitting, or (D.M.C.) embroidery cotton, or wool, a very coarse knitted vest, jersey, petticoat, men's and boys' stockings or socks, with holes, slate and coloured chalks, crochet hook.

For the Class.—A piece of coarse woven stocking-web, or a strip of very coarse knitting, suitable darning-needles, and darning cotton or wool, sewing needle and coloured cotton, crochet hook.

Method.—1. (a) Explain that the coarse stocking-web given to the class is to represent the coarsest of knitted garments, *e.g.* cyclists', cricketers', fishermen's, and sailors' hand or machine knitted jerseys, vests, stockings, etc., and that holes in these garments must be treated differently from holes in finer knitted or woven garments; (b) show a hole made in one of the above garments by fair wear, and point out that some of the loops have been broken, while others have slipped down, thus forming *ladders*, and increasing the size of the hole; (c) show the class that where the strands of wool are sound and unbroken, the ladders can be taken up with a crochet hook, or head of a pin, but where they are very thin, by being strained, it is best to cut them and the broken loops quite away, thus making the hole larger still, more regular in shape, and more easy to darn; (d) as the knitting in the frame and the stocking-web the class is going to learn upon are both new, show how to cut a hole on the knitting and the woven web thus:—turn the knitting with the wrong side towards the class, and cut across the material, between two ridges for five or six loops, then count up or down five or six ridges, and cut across same width as the first; tell the class to do the same, somewhere about the middle of their piece of web, while you examine and help individually; then show how to cut this loosened square down its centre, and ravel out the strands, the class doing the same; (e) turn your apparatus with right side towards the class, and show how to free the loops of broken strands and loose ends, carrying the longer ends to the left and right sides of the hole, and

with a crochet hook securely fasten these ends over and under the horizontal ridges of the web, without altering the appearance of the up and down loops; (f) tell the class to free the loops of their web, in the same way, and to crochet the long ends at the sides into the web. Examine and help, individually.

N.B.—Every loop must be sound and unbroken, but care must be exercised in freeing the loops of broken strands and ends, that sound strands the entire width of the hole are not drawn out: if by accident this is done, then recapitulate the method of taking up ladders with the head of a pin or crochet hook.

2. (a) Illustrate the right and wrong sides of the web, to show the principle of its manufacture, and draw a diagram of the wrong side with a hole and the loops free of ends; (b) point out by your own apparatus and the slate illustration that the *down* loops must be fitted or dovetailed into the spaces between the *up* loops and *vice versa*; that to prevent the loops from slipping, it is advisable in very coarse woollen knitting to dovetail by means of a sewing needle and cotton, before commencing to darn; (c) turn the wrong side of your apparatus to the class, and show how to weave the sewing needle under and over the loops at the left-hand edge of the hole, beginning either at the top or the bottom (if at the top the down loop, if at the bottom, the up loop in the succeeding row must be taken); (d) tell class to weave their sewing needles under and over the loops at left-hand edge of hole, in this way, while you go in and out examining and helping; (e) show how to put the sewing needle quite through an up loop, and then carry the needle across the hole, and pass it quite under the up loop, in the space between two down loops, drawing the needle and cotton through very carefully, neither too tight nor too slack; (f) illustrate these

dovetailed loops by drawing a vertical line in coloured chalk; (g) tell class to fit or dovetail two up loops in the same way; examine individually; (h) show again how to put the needle quite through, without splitting the down loop in the next row, and dovetailing it into the space below, between two up loops, by putting needle quite under the down loop, draw the needle and cotton out as before; (i) illustrate; (j) tell class to dovetail the down loops in this way; examine and help, individually.

N.B.—Go on demonstrating, illustrating, and examining, till the right-hand edge of hole is reached, then show class again how to weave the needle under and over the loops at the side, so that the broken ends of wool are secured, then cut the sewing cotton.

3. *The Darn.*—(a) Recapitulate by eliciting and questioning the method of darning a thin place on stocking-web, explaining that all parts of the material close to the hole are sure to be strained very much, and must therefore be strengthened in the same way as a thin place (this part of the darn must correspond in size with the size of the hole, being neither more nor less); and that the shape of the darn must depend upon the shape and position of the hole. (The shape is generally a diamond, oblong, or square.) When you have demonstrated, illustrated, and examined the work of the class, as far as the left-hand side of the hole, where the sewing cotton is woven in, all must be ready to work together; (b) show the class how to weave the needle and darning cotton or wool under and over the side loops so as to secure these firmly, without making a cobble; prove to the class that you have secured the ends of your apparatus strongly, by stretching the knitting, then cut the ends rather close to the material to make the darn tidy on the wrong side; (c) tell the class to do the same,

while you examine and help the dull ones; (d) show how to darn the next row, being careful to explain that it is often necessary to put the needle under the loop above or below, as well as through the one with the sewing cotton in it, in order to keep the rule of *under one, over one*, turn your apparatus with right side to the class, to prove that your needle is going quite through the up loop, which is detached from the rest of the material, without twisting or splitting it, then carry your needle across the hole in a line with the sewing cotton, and put it under the up loop, in the space between two down loops, and continue the darn as for a thin place, in the shape you have chosen; (e) illustrate by a vertical line in another coloured chalk from sewing cotton; (f) tell class to dovetail two up loops in this way, and continue the row as high as it is necessary; examine each girl's work most carefully; (g) demonstrate each succeeding row on frame, and illustrate on the slate, till all the loops are dovetailed, then recapitulate the way to secure the loops at the right-hand edge of the hole and let the class go on darning the thin place, as far as you have indicated to them, by your own apparatus, and the slate diagram; then demonstrate collectively how to cut the sewing cotton, and draw it out.

N.B.—If the detached up-and-down loops have not been properly stranded with the darning material, they will be loose, and will slip down into ladders, when the sewing cotton is removed. This must be condemned, though you can show how to remedy it, in crossing the darn, yet with inexperienced darners, the loops are likely then to get twisted, and so spoil the evenness of the darn.

4. *Crossing the Darn.*—(a) Show by your own apparatus how to turn the work round, and darn across the material between the ridges, and under and over the darning cotton or wool only, except where it is necessary to

secure detached loops, and when the material is very much worn, then the crossing stitches may be taken through the material; (*b*) when girls are ready, show them where to begin to cross the thin place (generally

Wrong Side

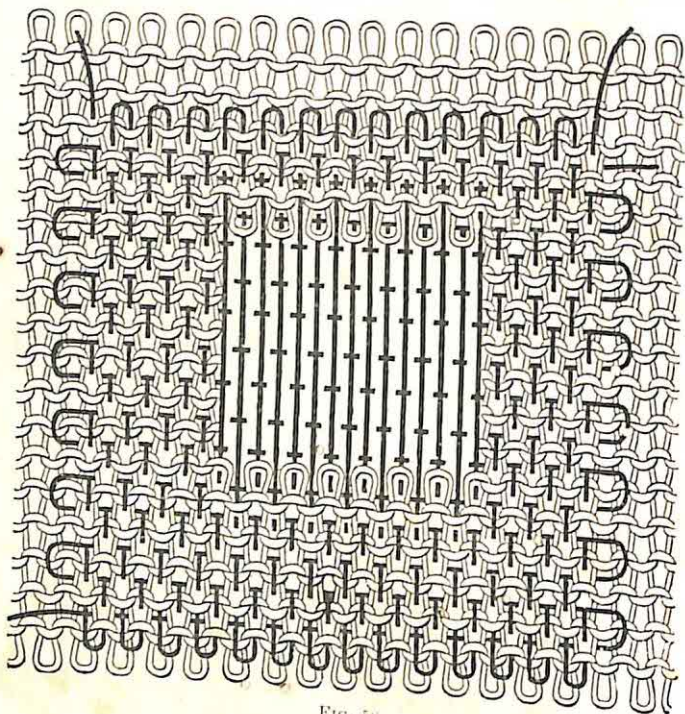


FIG. 58.

only a few rows above and below the hole should be double darned, but if the material is very thin it should be completely crossed); (*c*) illustrate on the slate with a different coloured chalk the first row of the crossing; (*d*) let class darn a row, while you again examine and help, individually; (*e*) explain that loops must be left,

and must be the same length as in the first part of the darn : (f) show how to darn the next row by putting needle over the darning wool, which it went under in the preceding row, and *vice versa*, so that the formula is under, over ; over, under, alternately ; (g) illustrate (Fig. 58) ; (h) tell class to go on working with you, till the hole is reached, then demonstrate and illustrate, clearly and patiently, how to cross the strands without twisting the

Right Side

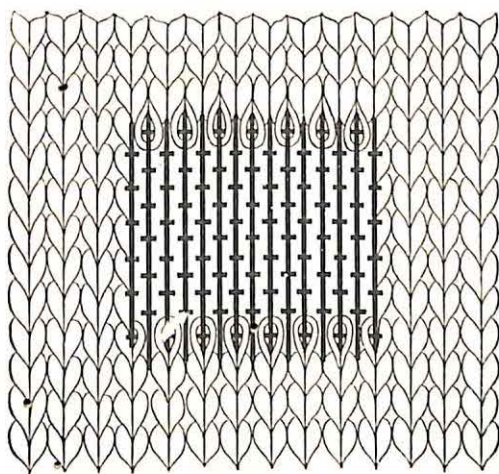


FIG. 59.

loops at the edges, and how to go under and over these strands alternately, so as to cross the hole closely, without puckering or bungling ; the class working with you ; (i) illustrate the completed darn on the wrong and right sides, in two different coloured chalks to show the crossing distinctly, and examine the girls' work, very frequently, supplementing the collective teaching by individual attention.

Notes.—1. This darn should be divided into two separate lessons. The first lesson might be the preparation of the hole, the darning of the thin place, and filling in half the hole, with illustrations: the second lesson might be completing the darning of hole and thin place, crossing the darn, and illustrations of wrong and right sides, when finished (Figs. 58 and 59). The girls cannot be expected to be perfect in darning, by doing only one or two specimens. Darning, to be perfect, requires much practice.

2. Though the knitting apparatus is very coarse, and the slate illustrations are big, yet it is not easy to make a large class see all the difficulties of the darn; for this reason it is better to divide the class into two or more parts, so that each may get a closer view, while you are demonstrating, and that you may be able to give more individual attention.

3. The girls should be encouraged to bring, in a clean condition, their fathers' or brothers' coarse knitted garments, and should be allowed to practise the darn on these, as well as on small specimens.

B. DARNING A HOLE IN FINE STOCKING-WEB

Class.—The same as in previous lesson.

Apparatus.—*For the Teacher.*—The knitting-frame, slate and chalks, a piece of finer stocking-web than in previous lesson, darning needle and suitable darning cotton, a woman's and child's hand-knitted, or woven stocking and sock, with holes in them, fine crochet hook.

For the Class.—A piece of finer stocking-web to represent the stockings, which are generally worn by women and children, darning needle and suitable wool or cotton (the darning cotton and wool should always be a little finer in texture, than the stockings and socks to be darned); fine crochet hooks.

Method.—1. (*a*) Show the class the holes in the stocking and sock made by actual wear, and point out that in some cases the loop is only partially broken, while in others the material is very much damaged; (*b*) explain that in ordinary home darning of fine stocking-web, a sewing needle and cotton would not be used to draw the loops together.

2. (*a*) Cut one or two loops of the knitting in the frame, and stretch the material in every direction, to let the class see what a large hole is made, if stockings and socks are worn, after one or two loops have been injured; (*b*) tell the class to cut a loop or two, and stretch the material in the same way; (*c*) show class again how to draw the unbroken strands through the unbroken loops on the right side with head of a pin, so as to fill in the hole as much as possible with the original material; (*d*) let class do the same while you examine, telling the girls to free the loop or loops of broken ends; (*e*) illustrate on slate, the material on wrong side, with one or two loops disconnected; (*f*) show, by turning your apparatus with wrong side to the class, how to deal with a small hole like this: put the darning needle through a down loop, and closely dovetail it into the space below, drawing the needle and cotton through rather tightly, without puckering the web; (*g*) tell girls to turn work with wrong side towards them, and do the same while you examine; (*h*) show how to dovetail the next detached loop in the same way, the class working with you, then cut off the darning cotton or wool; (*i*) illustrate the loops closely drawn together; (*j*) recapitulate the darn for a thin place, darning a small space on all sides of the detached loops, and dovetailing them a second time, the class working with you.

- N.B.*—1. If the loops have been neatly drawn together, and closely filled in with the darning material, there is seldom any need to cross this darn.
2. The same care must be exercised in dovetailing a few detached loops with the darning material without twisting or splitting them, as in a big hole, where the loops are drawn together with sewing cotton, and the girls must be trained to see that the hole is not properly darned, unless the loops are thoroughly secured.
3. In home darning, as distinguished from school specimen darning, no notable housewife would think of cutting away all the broken original material of moderately fine knitted, or manufactured woven stockings and socks, but would endeavour to weave in the injured material, as well as dovetailing the detached loops, in the way described in the previous lesson. To darn fine stockings, etc., according to the method given in lesson *A* for very coarse web, would be most tedious, would waste time, and would be practically useless, because the girls would never carry the method into effect in their homes. Girls should, however, be taught both methods while at school, that they may know how to plain darn, both the coarsest and the finest stocking-web material.

CHAPTER X

MARKING—TUCKS

MARKING (CROSS STITCH)

A. The Stitch in a Simple Pattern

Apparatus.—*For the Teacher.*—Demonstration Frame, chequered board and coloured chalks, a square of Java or ordinary single-thread canvas, sewing needle and coloured

embroidery (D.M.C.), or knitting cotton, a garment, *e.g.* chemise, pocket-handkerchief, or some household linen, marked.

For the Class.—A square of Java or ordinary canvas, needle and coloured cotton.

Method.—1. (*a*) Show a garment with letters and figures marked on it, and explain that it is necessary to mark our garments, in order to recognise them, and to distinguish them from those of others in the same household; (*b*) write the word *marking* on the board, and elicit that it means a sign; (*c*) allude to the use of marking ink, and explain that though writing the initials or name in full in ink is a quick method, yet it is expensive, and that some marking inks run into blots, and also fret the materials into holes; (*d*) show the girls the proper kind of red and blue ingrain sewing cotton, that is generally used to mark underclothing and household linen, and tell them if the dye is *ingrain*, the cotton will not lose its colour when washed; (*e*) show by the garments that the stitch is worked on the right side, and on single material.

2. *The Stitch. Fastening on.*—Demonstrate on the frame how to fasten on: (*a*) bring the needle from the wrong side to the right between two selvedge threads on the left-hand side, and leave about an inch of cotton, which will be secured by working the cross stitches over it; (*b*) put a chalk dot between two selvedge lines of the board, and call it No. 1 (Fig. 60); (*c*) recapitulate on the frame, the class working with you; examine work; (*d*) show how to put the end of cotton on the wrong side in a slanting direction under the forefinger, so that it may be worked over, then tell the class to count with you two threads to the right, and down two threads, and put the needle under two threads horizontally from right to left. Let the class

do the same on their canvas, then draw the needle through, while you do the same on the frame; (e) point out that a slanting stitch has been made covering two threads, and explain that in marking two threads are generally taken each way, and that the stitch is made of two slanting stitches crossing each other; examine work; (f) recapitulate by chequered board, telling class to put samplers down, and work with you, count down two lines from No. 1, and two to the right, and put a chalk dot in the space, and mark it No. 2, then count two lines to the left of No. 2, and put a chalk dot, and mark it No. 3, draw a slanting line from

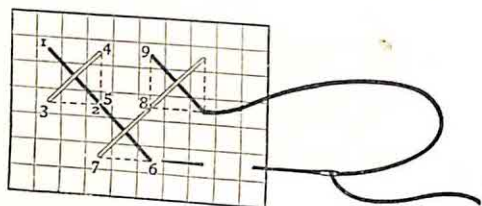


FIG. 60.

Nos. 1 to 2, and dot a straight line from Nos. 2 to 3; (g) tell class to take up samplers, and, at first, to watch what you do on the frame, then to work with you. Count up from where the cotton is coming out two threads, and two threads to the right, then put the needle in perpendicularly, so that the point comes out at No. 2, let the class do the same, and then draw needle out; examine girls' work; (h) recapitulate by the chequered board; count up from No. 3 two lines, and to the right two, and put a chalk mark—No. 4, then count down two, and put a mark—No. 5; draw a slanting line from Nos. 3 and 4, and dot a straight line from Nos. 4 to 5 (Fig. 60).

N.B.—The first half of every stitch should be illustrated on the board in one coloured chalk, and the second half in another, so that the rule of crossing every stitch in the same direction as the first stitch, may be clearly shown.

Rule for Crossing

3. If in the first stitch, the second and upper half crosses the first and under half from left to right, all the succeeding stitches must be crossed in the same direction, and *vice versa*.

The Pattern

4. (a) Count down from where the cotton is coming out two threads, and two to the right, and put the needle under two threads horizontally, and draw it out, the class working with you; examine girls' work; (b) recapitulate by the chequered board, drawing a slanting line from Nos. 5 to 6, and a dotted straight one from Nos. 6 to 7; (c) demonstrate by frame, the class working with you, count up from where cotton is coming out two threads, and two to the right, and show how to put the needle under two threads vertically, so that the point of the needle comes out upwards, draw needle out, and elicit that the cotton is coming out two threads away from the first stitch, and in the proper position to make the under half of third stitch in the same direction as in the first and second stitches; (d) recapitulate by illustrating in two coloured chalks as before, and examine work; (e) the third stitch is worked in the same way as the first, and the fourth as the second, all along the sides of the sampler; (the girls should tell you how to work the third stitch); (f) illustrate the third stitch, which completes the pattern (Fig. 60).

Fastening off

5. Bring the needle to wrong side and darn it under and over the stitches, and cut the cotton quite short.

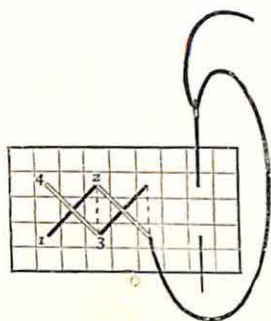


FIG. 61.

Notes.—1. Any other simple pattern may be taught in the first lesson, or the single stitch may be worked in a straight line. If the stitch in a straight line is taught, then the first half must go from left to right, and the dotted line will be perpendicular, the second half will cross from right to left, and will be slanting on both the right and wrong sides (Fig. 61).

B. THE CAPITAL LETTERS

(In order of difficulty—I, H, L, E, T, O)

Method.—1. (a) As soon as the girls can work the stitch accurately, either in straight lines or in simple patterns on their samplers, sketch the letter I in the shape known as the diamond, on the chequered board, in two coloured chalks, so as to show clearly that the crossing is all in the same direction; (b) elicit that the pattern taught in the first lesson forms portions of the diamond-shaped I, and explain that by analysing the letters, you have found out that this letter is the

simplest capital in the alphabet ; (c) let the girls analyse the letters with you, before they proceed to mark the letter I ; and elicit that H is a compound of I, and is a little more difficult to mark ; that L is I with additional stitches at the bottom towards the right ; that E is I with additional stitches at top and bottom, and in the middle towards the right ; that T is I with additional stitches at the top to the left hand and the right hand ; that O is not at all like I ; (d) explain that O is the simplest of the circular letters, and the type of C, G, and Q ; (e) recapitulate the stitch on the frame, working with the class, till the whole of the letter is finished, and illustrating step by step on the chequered board, with the different coloured chalks ; (f) point out that all capital letters are seven cross stitches high, that every letter must be neatly fastened off on the wrong side, before the next letter is begun ; (g) sketch the letter H on the chequered board, four lines away from the letter I, and point out that some threads of the material must be left between each letter, and that the number of threads varies, being two, or four, or eight, according to the quality of the material to be marked (on fine linen eight threads must be left), and that when the capital letters are *initials* (write this word on the board and explain its meaning), a cross stitch must be placed between each to indicate a full stop, as in writing or printing ; (h) recapitulate the stitch on the frame, working with class till the first I is completed, then let girls fasten off, and begin the second I two threads away from the first, and when this part is finished show how to connect them by two extra stitches in the centre ; (i) illustrate step by step on the board, and examine girls' work frequently (Fig. 62).

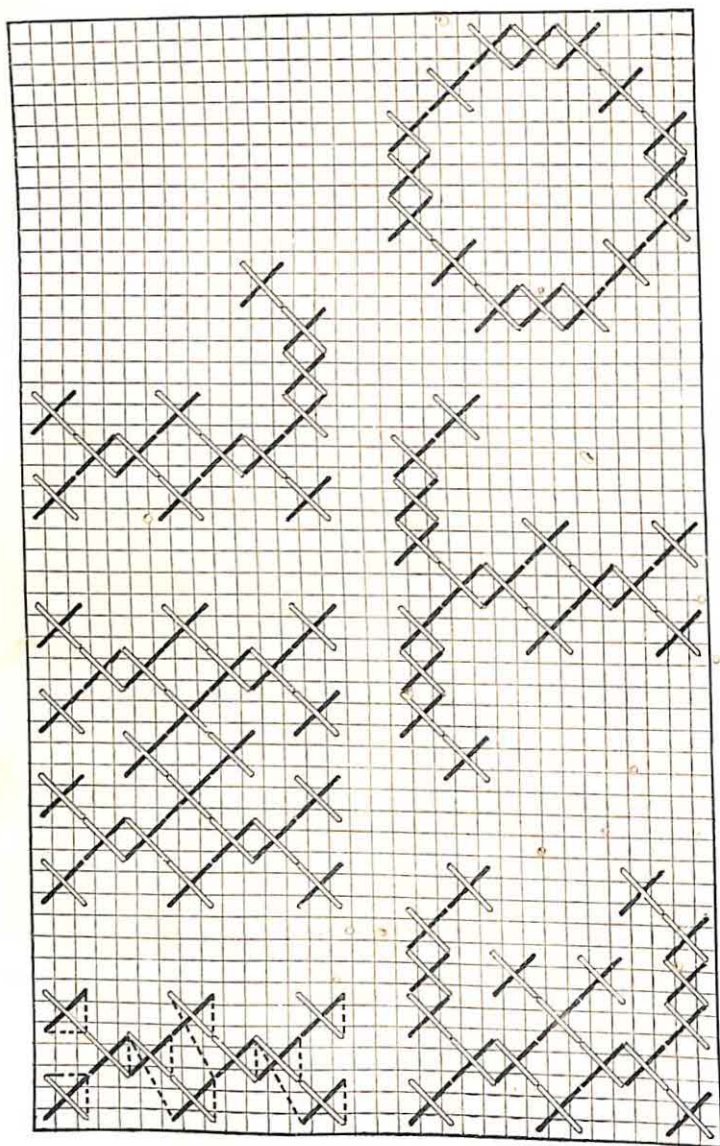
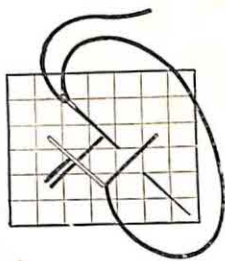


Fig. 62.

- N.B.*—1. Sketch every succeeding letter on the chequered board, before the girls begin to work them. They will soon be skilful enough to copy the letters so sketched for them. The letter O should, however, be taught separately by frame and slate, because it is the most difficult, and unlike any of the preceding five, besides being a type of C, G, and Q.
2. The girls should draw the letters in their sectional exercise books, and the most expert should be encouraged to work the whole of the alphabet on their samplers, and should sketch, as a supplementary home lesson, the letters which are made up of I and O, and should arrange the other letters in groups, according to likeness or unlikeness to each other, and the letters I and O.
3. John Taylor, the water-poet, mentions Chain-stitch, Queen-stitch, Spanish-stitch, and Braue-Bred-stitch in his poem on "The Praise of the Needle." These were stitches often used in marking clothing. Braue-Bred-stitch is the same on the right and wrong sides. The method of working it is as follows:—bring the cotton from wrong side to right between two selvedge threads, then put the needle in higher up to the right, in a slanting direction, and bring it out at the left-hand bottom corner, where the cotton was first brought through, then illustrate on the board two slanting lines, one dotted to represent the slanting stitch on the wrong side; put the needle back into the middle of the square, under the slanting stitches, and bring it out at the right-hand bottom corner, two threads from the commencement of the stitch, thus forming a half slanting stitch; illustrate on the board; cross the stitch by counting up two threads, and two to the left, and put the needle in, in a slanting direction at left top corner, and bring it out at the right-hand bottom corner. This cross stitch covers two threads each way, with an additional half stitch in the centre; illustrate on the board (Fig. 63). Braue-Bred-stitch should only be taught to advanced pupils in the upper classes, because some practice is needed in order to bring the needle out in the right place, for each succeeding stitch of the letter, so as to keep the rule for crossing.



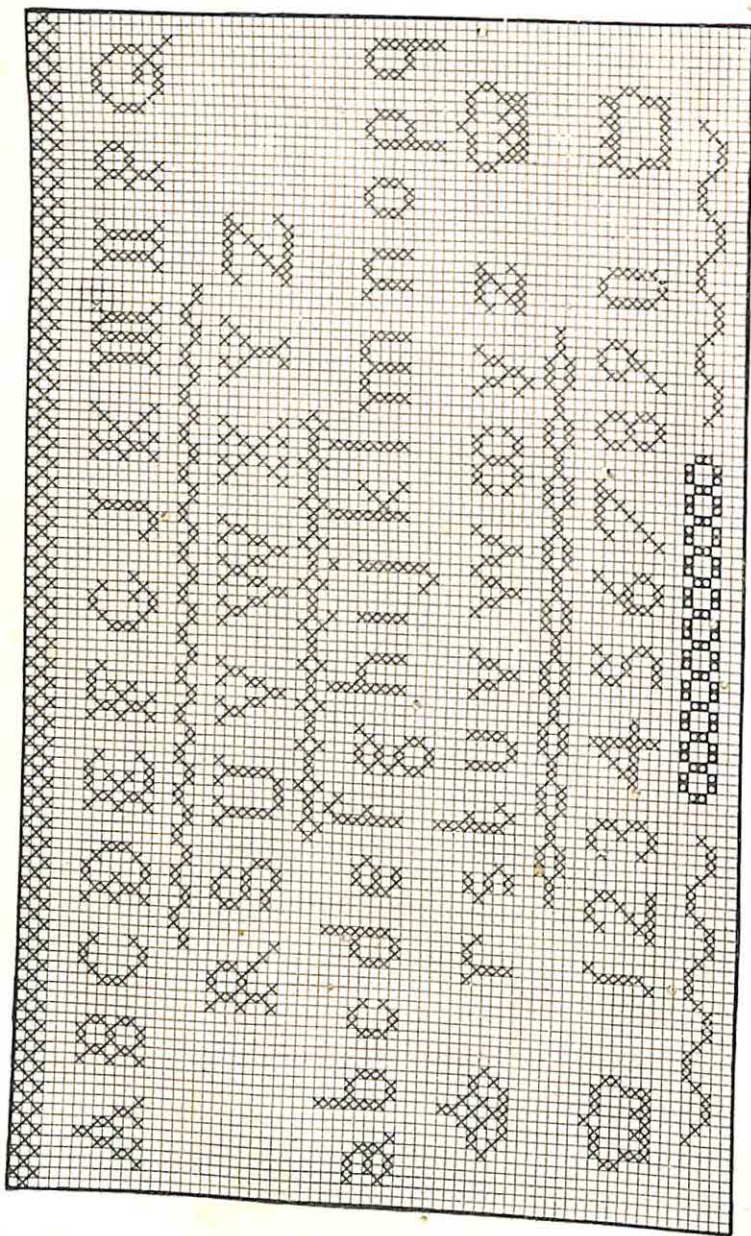


FIG. 64.—The capital letters I, H, L, O, and T are in Fig. 62.

4. In gentlemen's families the house linen is either marked with the gentleman's full initials, or with the lady's Christian name after the gentleman's. In noblemen's families the marking is surmounted by coronets.
5. Stockings should be marked with a contrasting colour in cotton, wool, or silk, according to their texture. Some expert knitters form the initial letters, while knitting, by a fancy knitting stitch just below the welt.
6. The girls should be allowed to practise the marking of letters and figures on pocket-handkerchiefs, table-cloths, sheets, towels, etc., and on underclothing, so that they may learn where to place the letters and figures accurately. The initials, or full name, should be marked on household linen, and on pocket-handkerchiefs, at the left-hand top corner, below the hem. Chemises, shirts, and night-gowns should be marked below the folds or false hems; drawers, just below the band, on single material.
7. A good plan for marking fine textures is to tack to the article to be marked, fine canvas, and to work the cross stitch through canvas and linen, and cut canvas away afterwards.

MAKING AND RUNNING TUCKS

Class.—Older Girls, Pupil Teachers, and Students.

Apparatus.—*For the Teacher.*—A large square of coarse calico or holland, the Paragon, needle, tacking and sewing cotton, pencil, tape measure, or a printed card measure, or a strip of folded paper notched the depth of the tuck, and also the space between the tucks, slate and chalks, finished garments to explain the use and purpose of tucks.

For the Class.—A square of calico or holland (5 × 5 inches), needle, tacking and sewing cotton, printed card measures, pencils.

Method.—1. (a) Show some finished garments, *e.g.* nightgown, chemise, pinafore, frock, petticoat, blouse, woman's bodice, drawers, etc., and point out the use of tucks in the garments: (1) on fronts of nightgowns, chemises, blouses, pinafores, bodices, they are used *to narrow* the garment, instead of gathers; (2) on petticoats, frock skirts, drawers, bottoms of muslin pinafores, they are used *to shorten* at first and then *to lengthen* the garment by letting down the tuck, as, for instance, in the case of growing children, and in all shrinkable materials; (3) tucks are also useful to hide joins in garments that have been mended, *e.g.* a new piece of material at the bottom of a petticoat or frock skirt, or in widening a frock body; (4) the purpose of tucks is to make garments pretty, thick, and therefore warm, (a tucked flannel petticoat or frock skirt is heavier than one not tucked, and is decidedly warmer); (b) show that the tucks which narrow the garments are made up and down with the selvedge, while those that shorten go round with the width of the material; (c) write the word *tucks* on the board, and quickly show by the garments that they are all made of double material, which is folded over on to the single material; elicit that the word *tuck* means to fold under; (d) point out that tucks are made on the right side of the garment.

2. *The Hem.*—(a) Explain that, as tucks must always be made in depth, in proportion to the hem below them, it is better to fix a hem first, and as the girls have not fixed tucks before, they will find it easier to fold them the selvedge way of the material, thus representing the front of a chemise; (b) recapitulate the finding of the selvedge, and tell girls to hold it from left to right, then show them how to measure from the top edge downwards a quarter of an inch, with the inch measure, and turn this

fold down towards them quite evenly ; when you have demonstrated for about an inch let the girls work on without help, then examine ; (c) holding the wrong side towards you, show how to measure down at right-hand side, from the top edge three-quarters of an inch, and turn this depth towards you ; let class do the same, measuring at intervals, to keep the hem quite even in depth, and pressing and flattening the folded top edge, before tacking it ; (d) recapitulate tacking a hem, and examine girls' work, when done ; (e) illustrate the piece of material with hem tacked on the right side (Figs. 65 and 66) ; (f) explain that with a hem of this depth tucks should not be wider than one-sixth or one-quarter of an inch, and elicit how much the material has been narrowed by the hem, viz., one inch, and that the material is now 5×4 inches, instead of 5×5 ; (g) mark the right-hand side of the illustration at the tacking thread of hem X (Fig. 65).

3. *Making $\frac{1}{4}$ -inch Deep Tucks.* — (a) Show by the slate illustration, and then by your own specimen, how to measure for the tucks, thus :—measure upwards from X three-quarters of an inch in quarter-inches, and put a mark on the illustration B three quarter-inches (Fig. 65), and dot a line across from B to C, and dot another line a quarter of an inch below BC to show the depth of the tuck DE ; explain that the quarter of an inch of material above the tacking of the hem, is for the space between the tuck and the hem, and that the space between all the tucks must be the same ; that the quarter of an inch above the space is the place where the tuck will lie, when it is folded over towards the hem ; now tell girls to work with you, and to hold the right side of the work towards them, and elicit why—because tucks must be folded on the right side of the garment—then measure up from X three-

quarters of an inch, and fold the material away from you, and flatten and crease it, placing the measure at intervals to get the right depth, between the top folded edge and the tacking thread on the hem; next tell girls to measure one-quarter of an inch down from the creased edge, and turn down a fold towards the hem, just as if fixing a hem, measuring repeatedly to get the tuck the exact depth all across the material, tell them to lift up the tuck, and see

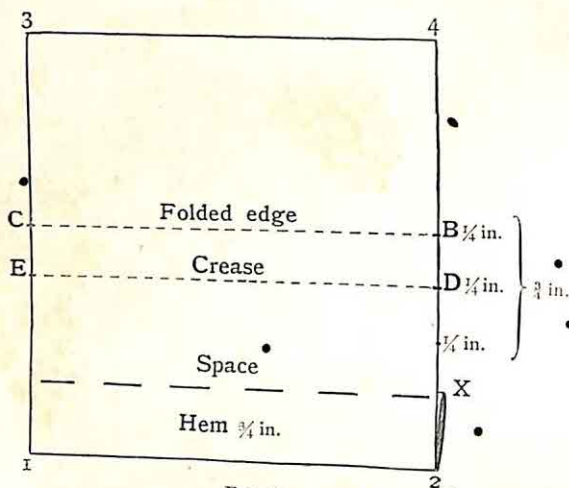


FIG. 65.

if there is a crease in the material, one quarter of an inch from the top edge. Examine girls' work, and point out that this crease is represented in the illustration by DE (Fig. 66). Before tacking the tuck, make girls see that it has two parts, an under and an upper, and that being double it contains half an inch of the material. Start the girls with the tacking, telling them to be most careful to keep the stitches straight, and to take them quite through the double material, then illustrate the tacking stitches

and the tuck folded over (Fig. 66). Elicit how much the material has been narrowed by the tuck, viz. half an inch, then by hem and tuck, and ask girls to tell you how long their material is, and how wide, viz. $5 \times 3\frac{1}{2}$ inches.

N.B.—In explaining about the space between the hem and first tuck, and between tucks, tell girls that the space, like the tucks, varies. If the tucks are moderately narrow, the space should be the same as the depth of the tuck; if the tucks are wide, the space should be one-third or one-half the depth. If

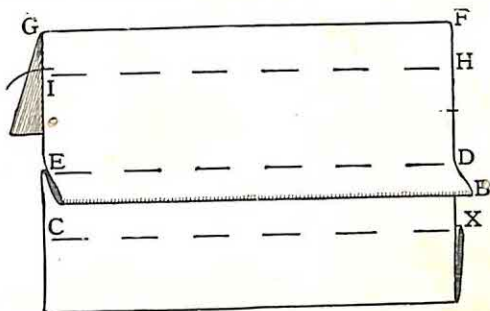


FIG. 66.

tucks are very narrow and made in sets, no space is left between them separately, but only between the sets. In this case the edge of each tuck just touches the running stitches of the preceding one. The stitches must be distinctly seen; the edges of the tucks must not cover them.

4. *The Second $\frac{1}{4}$ -inch Tuck.*—(a) Show girls how to press the first tuck down quite flat and even, then measure on the slate a space upwards from D to represent three-quarters of an inch, and mark it FG, then a space down from FG one-quarter of an inch, and mark it HI; (b) tell girls to work with you on their material, and show them how to hold right side towards them, and measure up from D three-quarters of an inch in quarter-inches, eliciting what these are for: (1) the space between, (2) the space

for tuck to lie on, (3) the depth of tuck; proceed to fold the material back from you, measuring continually and creasing the top edge deftly, as in the first tuck; examine work and illustrate (Fig. 66). Show again how to fold the double material towards the hem at the depth of a quarter of an inch, pressing it firmly to get a crease on the under side; elicit (1) that this second tuck contains half an inch of the material, (2) that it has an under and an upper side, (3) that it narrows the material half an inch, (4) that it is one-quarter of an inch when doubled, (5) that the material is now 5×3 inches; so that with two quarter-inch tucks, one inch of material must be allowed. Start the girls with the tacking, again cautioning them to be careful not to spoil the fixing. Illustrate the tuck tacked (Fig. 66). Examine girls' work while they are tacking the second tuck.

5. *The Running Stitch*.—(a) Show by the garments that the running stitch is worked on the under half of the tuck; (b) show by the frame how to work the stitch, the girls using their canvas samplers:—Fasten on at the right-hand side by taking up a small portion of the double material between two threads, and working over this two or three times as in back-stitching, then pass over two threads and take up two, the girls doing the same on their canvas; (c) explain that the rule is to take up as much as is passed over, but that in actual practice the rule cannot be carried out successfully, for it is found that if two threads of double material are taken up, a smaller stitch is made on the upper part of the tuck than the spaces left between the stitches, so, for this reason, it is best to take up a little more than is passed over, three threads if two are passed over, four, if three are passed over; (d) illustrate the stitch on the chequered board (Fig. 67) and on the

first or second tuck (Fig. 68); (e) let girls fasten on and work the stitches on the first tuck; (f) examine to see that the fastening on is strong and secure, and that the stitches are taken quite through the double material, so as to be distinct and even, on the upper part of the tuck.

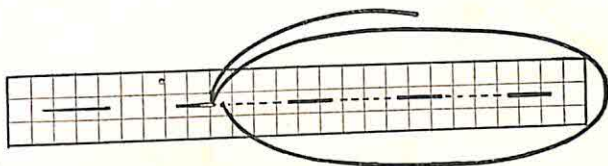


FIG. 67.

6. *Fastening off*.—(a) When the end of the tuck is reached, show how to fasten off by working back over the last stitch two or three times, and passing the needle

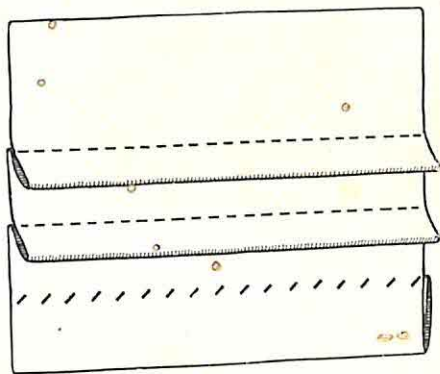


FIG. 68.

through the last back stitch to form a knot, and break the cotton; (b) if the cotton should break before the tuck is finished, show by frame how to fasten off the old and fasten on the new needleful, thus:—put the needle back to touch the last stitch on the wrong

side, and pass the needle up between the double material to the top edge, as in one method of fastening-off stitching, then cut the cotton; fasten on the new cotton on the top of several of the running stitches, some distance backwards, at first by a back stitch or two, and then by

working over the first running stitches, so as to produce double stitches, on both sides of the tuck.

Another method is to pass the needle up between the double material on the wrong side, close to the last running stitch, and work a back stitch or two over it. The disadvantage of this way is, that ends of cotton make the wrong side of the garment untidy.

Notes.—1. The girls should be allowed to fix and run tucks on a garment, and should be encouraged to design the arrangement of them into sets, and to make them of a different depth from the specimen first worked, or the dull ones will think that all tucks must be a quarter of an inch deep.

2. Machine stitching is placed on the upper part of the tucks, and so is feather stitching.

Some people hem tucks on the wrong side of the garment.

3. Tucks, in order to be flat and even, must be well creased at the folded edges with thumbs and forefingers.

4. Tucks are frequently employed in dressmaking and millinery for ornamentation and style.

CHAPTER XI

CROSS CUT AND HEDGE TEAR DARNS—SETTING IN A
WOOLLEN PATCH BY HEDGE TEAR DARN

CROSS CUT OR DIAGONAL DARN ON LINEN

LESSON A—DRAWING

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Chequered board, chalks, an article with a cross cut, *e.g.* a table-cloth, child's pinafore; a square of linen yarn, or very coarse Saxony cloth (Oxford shirting), flourishing thread and darning needle, pencil, scissors or penknife.

For the Girls.—A square of linen material, or very coarse Saxony cloth (Oxford shirting), flourishing thread of two colours, needle, sewing cotton, pencils, scissors or penknives, inch measures.

Method.—1. (*a*) Show girls the table-cloth or garment cut obliquely, and point out by roughly drawing a diagonal line on the chequered board, that in a cut like this, both the warp and woof threads are destroyed at the same time, and that such a slit is caused by a sharp instrument

being pressed against the material, as in carelessly cutting bread on the tablecloth, or by the knife slipping against the pinafore, while sharpening a pencil; (b) explain that this kind of cut must be darned in a particular way to prevent the slit from gaping; (c) show girls how to find the selvedge and let it go up and down, and how to crease the squares diagonally, and then with a sharp penknife or scissors cut a slit half an inch long, in the middle of the square, and either from the right-hand top corner towards the left bottom corner, or from left top corner to right bottom one.

(N.B.—In the first lesson all must cut in the same direction.)

(d) Illustrate this cut on the chequered board, marking the corners Nos. 1 and 2 (Fig. 69).

2. *Drawing the First Rhomboid.*—(a) Show girls how to measure a quarter of an inch above and below the slit, and explain that it is a good rule when the cut is a true diagonal, to leave a space half the length of the slit on either side of it, so as to form a square; (b) mark these points Nos. 3 and 4 on the board; (c) tell girls to do the same on their linen, and examine to see if they have done this correctly; (d) show where to place the figures 5 and 6 to form the square, and explain that the sides must be the same length as the cut, plus the spaces on either side of it, this will be an inch if the cut is half an inch; (e) let girls do the same on their work, and then examine; (f) explain that it would not be a strong method to darn this style of cut in the form of a square, because the sides of the slit would not be sufficiently protected, and would gape very much, when the material was pulled diagonally, so it has been found expedient to enclose the slit by two rhomboids, crossing each other, thus giving the appearance of two triangles, when the darn is completed; (g) write

(j) examine ; (k) then show how to connect 7 to 6 through 3, and 5 to 8 through 4, by straight lines, then elicit how to connect 5 to 7 and 8 to 6, viz. by slanting lines ; (l) when girls have done this, point out that the first rhomboid is completed, and that it goes up and down with the selvedges.

3. *The Second Rhomboid.*—(a) Show girls how to draw the second rhomboid across the first, without turning the work, by extending on the board the corners 3 and 4 outwards ; No. 3 to the right and No. 4 to the left, and marking them 9 and 10 ; (b) let girls mark their squares in the same way ; (c) elicit how 9 is to be connected with 5, viz. by a straight line passing through 3 ; then how 6 is to be united to 10, viz. through 4 ; (d) let girls draw faint pencil lines, *after* you have drawn them on the board, then call one or more of them out to finish the figure on the board, the others extending the slanting lines 7 and 5 to 10, and 8 and 6 to 9 ; (e) call upon girls to name the numbers of the first rhomboid, then of the second, and also the numbers of the two triangles (Fig. 69), and to point out that the cut agrees with the bases of the triangles, by the way in which it runs.

LESSON B—THE DARNING

Apparatus.—*For the Teacher.*—Demonstration Frame, and Paragon.

1. *Fishbone Stitch.*—(a) Explain that if the edges of the cut are very much frayed, they must be drawn together by a stitch called the *fishbone* ; (b) show how this stitch is worked by using a needle and coloured sewing cotton, and passing it under and over the edges, so that the stitches are interlaced, and prevent the edges from ravel-

ling out, when the darning is being done; (c) let the girls draw their edges together in the same way, and examine their work; (d) illustrate the fishbone stitch on the diagram (Fig. 70).

N.B.—The cotton of the fishbone stitch must not be taken out, when the darn is completed, because it distinctly shows that the hole was cut, before the darning was begun.

2. *Darning.*—(a) Recapitulate the lesson on darning a thin place, by the frame, and tell girls if the linen is fine, they can take up two or three threads on the needle, and pass over the same number; (b) when you have darned a few rows on the frame, to recall the chief points, *e.g.* leaving threads between each row, and loops at top and bottom, then let girls begin at left-hand side of first rhomboid, either at the top or bottom, while you again demonstrate on the Paragon, or a large square of linen; (c) illustrate this row on the board in white chalk; (d) when the girls are ready to work the second row, demonstrate again, and leave either one or two threads between the rows, according to the number taken up on the needle, and point out that it is necessary to ignore this rule at the top and bottom slanting lines, sometimes, so as to keep the bases of the triangles even on the right side; (e) illustrate this row on the wrong side of diagram (Fig. 70), and question girls about the uses of the loops which are left (to allow of working up into the original material, when the article is in use again, or for shrinkage in the wash); (f) when girls have finished this row, examine their work; (g) and, when the corner of the slit is reached, show by your own linen square, how to pass the needle under the raw edges, so as to keep them to the wrong side and yet to darn them in securely; point out again that the rule of under two and over two must be ignored

here, if it interferes with strengthening the slit (the pattern can be easily kept above and below the hole); (*h*) illustrate on board, and examine girls' work; (*i*) go on demonstrating, illustrating, and examining, till girls have darned the first rhomboid; (*j*) show them how to turn their work

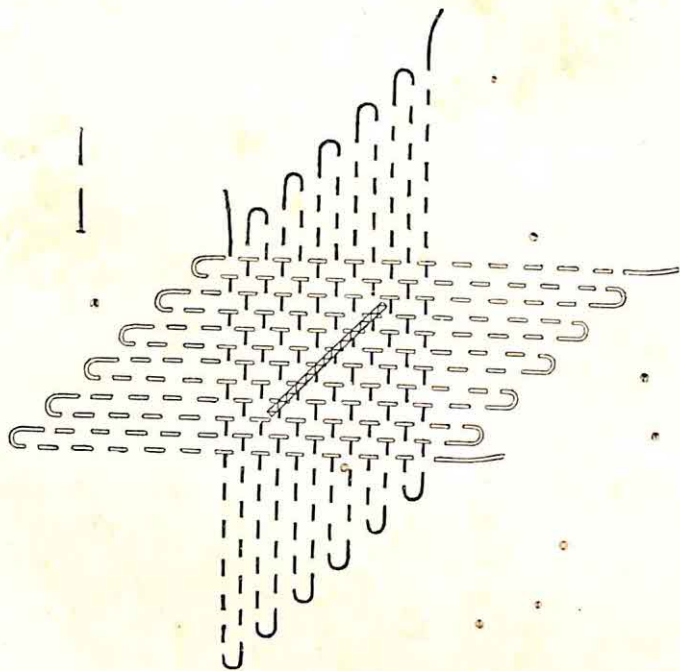


FIG. 70.

round, and darn the second rhomboid in the same way as the first, with another colour, being careful to take the needle quite through the stuff, when crossing the stitches of the square, so as to firmly fix the slit, and to darn in all the jagged edges of the cut.

(*N.B.*—The square is double darned, both on wrong and right sides, the angles are only darned once.)

(*k*) Illustrate the darning on the second rhomboid with a coloured chalk; (*l*) explain that the pattern of the double darn may differ in the girls' work, and may be wavy, or a series of crosses, or like the letter T; (*m*) show girls by the frame that these patterns differ according to the way in which the needle is placed in regard to the stitches of the first darn, but all are correct.

Notes.—1. If the cut gapes a great deal, before the edges are drawn together by the fishbone stitch, the hole, when darned, will look like the common darn on stocking-web, in that the crossing threads of the darning material will give a cross bar appearance on the right side. This is far preferable to drawing the edges closely together and making a cobble.

2. This darn is often voted an unnecessary needlework exercise in Elementary Schools, because the girls are not likely to carry it into practice in their own homes. There is some truth in the objection, but thoughtful teachers will consider the possible future of their pupils, and will agree, that if any of them are ever entrusted with the care and oversight of their employers' household linen, the lessons on darning, given while at school, will be valued by them, when earning their own livelihood.

3. The girls should be allowed to cut diagonal and other kinds of slanting lines in different directions, and should darn them either in school, or as a supplementary home lesson.

4. In Voluntary Schools, there would be no difficulty in getting some of the table linen from the homes of the managers, and the older girls should be trusted to darn these, if the time given to needlework will allow of it.

5. Some object to the rhomboids being drawn on the linen with pencils, and prefer creasing the lines. The pencil marks would be only faintly drawn, and would soon wash out, while the creases often get obliterated, while the darn is in progress.

A THREE-CORNERED TEAR OR HEDGE TEAR

A. DRAWING LESSON—B. STITCHES

(See Lesson on Cross-Cut Darn)

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher and Class.*—The same as for a cross-cut darn.

Method.—1. (a) Show a dress or apron, which has been accidentally torn, by being caught on a pointed edge, e.g. a desk, or on a thorny bush; (b) explain that country people call this kind of hole, a *hedge tear*; and (c) point out that the selvedge threads are broken from C towards B, and the woof threads from B towards A, but that at corner B, both kinds of threads are severed from the rest of the material; (d) show girls how to cut a three-cornered hole on their squares of Saxony cloth, or coarse linen yarn, by cutting with a penknife half an inch across the width, and a little more than half an inch with the selvedge.

2. *Drawing the First Oblong Selvedge Way.*—(a) Tell girls to find the selvedge of the material, and put in a pin, then show them some finished specimens of *hedge-tear* darning, and point out that the three corners have been enclosed either by an oblong within an oblong (Fig. 73), or by oblongs crossing each other as in Fig. 72), or by a square within a square, if the sides of the tear are equal; (b) illustrate the tear on the slate, and mark the corners A, B, and C; (c) show girls how to measure away from corner B, three-eighths of an inch (or half an inch), and then the same distance to the right from corner C,

down and up till corners Nos. 3 and 4 are reached, when the first or selvedge oblong will be completed. In darning on the wrong side, be most careful to push up the raw edges to the wrong side; (c) turn the work round, and begin at corner No. 5, and darn down and up, till corners Nos. 7 and 2 are reached. Examine the completed darn.

Notes.—1. If this tear is on a cashmere, merino, woollen or

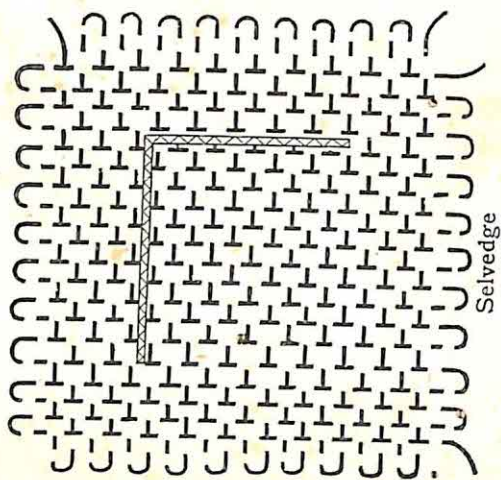


FIG. 73.

silk gown, it is often very difficult to match the darning material in colour and texture. Cashmeres and Merinoes are best darned with silk, and afterwards pressed by an iron. Woollen materials may be darned with fine wools, *e.g.* Shetland and Angola. If the tear is found on underclothing, holland pinafores, bed or table linen, then fine sewing cotton or flourishing thread must be used, according to the texture of the damaged article.

2. Loops should be left on all darning materials, whether

cotton, silk, flax or wool, to allow for working up into the garment, as well as for shrinking in the wash.

3. In lined materials, the darn must be worked on the right side, if the tear is in a position which will not allow of unpicking the lining.

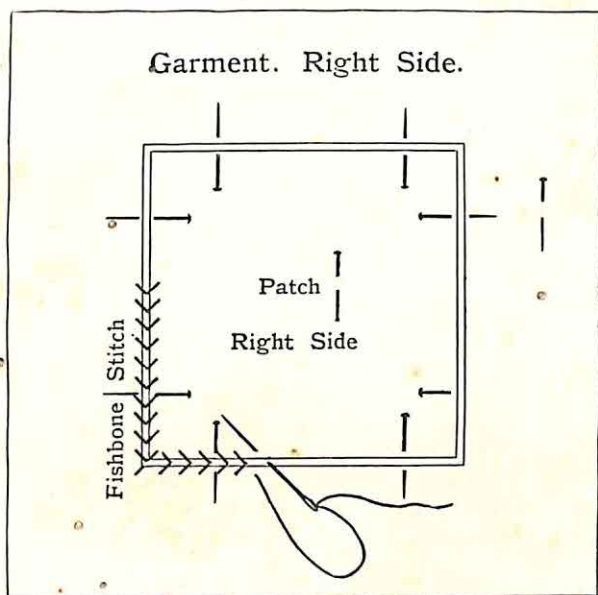


FIG. 74.

SETTING IN A WOOLLEN PATCH, BY HEDGE TEAR DARN

Apparatus.—Two pieces of thick woollen dress material, such as a plaid pattern, checks, tweed mixtures, or cloth, ordinary sewing cotton, and fine mending wool, the colour of which should match the prevailing foundation tint of the dress material; chequered board and chalks, etc.

Method.—1. Cut away all the worn part of the garment, making the sides of the hole a square or an oblong.

2. Prepare the piece for the patch, making its sides match those of the hole, put in a pin to indicate the selvedge way of the threads; and make the patterns of patch and garment match exactly, on the right side.

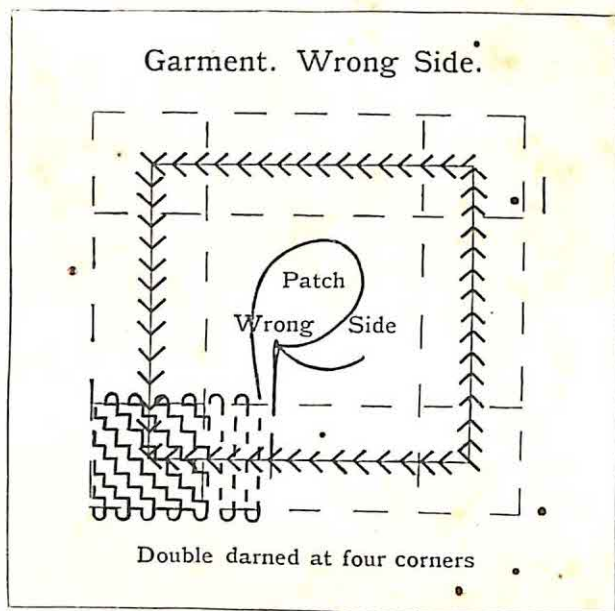


FIG. 75.

3. Holding the right side towards you, fit in the patch, without overlapping the sides of hole, and with needle and sewing cotton draw the edges together by fishbone stitch.

N.B.—A good plan is to put in pins as shown in Fig. 74.

4. Turn garment to wrong side and tack, at equal distances, above and below the edges in form of oblongs, which act as guides, while darning (Fig. 75).

5. Begin to darn on wrong side, from left to right,

taking care to keep straight vertical rows, and all the raw edges of hole and patch to the wrong side, and drawing both together without puckering. All the corners will be double darned (Fig. 75).

6. Take out fishbone stitch, unless cotton is of same colour as dress material; and press with a hot iron on wrong and right sides of the darning.

CHAPTER XII

PRINT PATCHING, AND GUSSET

PRINT PATCHING

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—The Paragon Apparatus or two larger pieces of print than those given to the class, needle, tacking and sewing cotton, pins, slate, chalks, a patched gown, child's frock, apron, or pinafore.

Method.—1. (a) Show a garment that has been so successfully mended, that the patch is almost invisible; (b) elicit the methods of patching flannel and calico, and explain that the chief feature of mending print is *matching* the pattern, and the chief difficulty is to get a piece of material of the same pattern, large enough to repair the damaged part, and yet to match the pattern in every particular; (c) tell girls that when print garments are made, some of the material should be kept in reserve for the purpose of mending; (d) that as the garment has been worn and washed often, the mending piece must be well washed before it is used, or the colours will be more vivid than those of the article to be repaired; (e) draw an illustration of the two pieces of material on the slate; (f) recapitulate method of finding the selvedge of both the

garment and patch, and point out that if the pattern is a *stripe*, it usually goes up and down with the selvedge, and as this is a first lesson on print patching, the print chosen has a striped foundation.

2. *Fixing*.—(a) Tell girls they must cut a hole in the

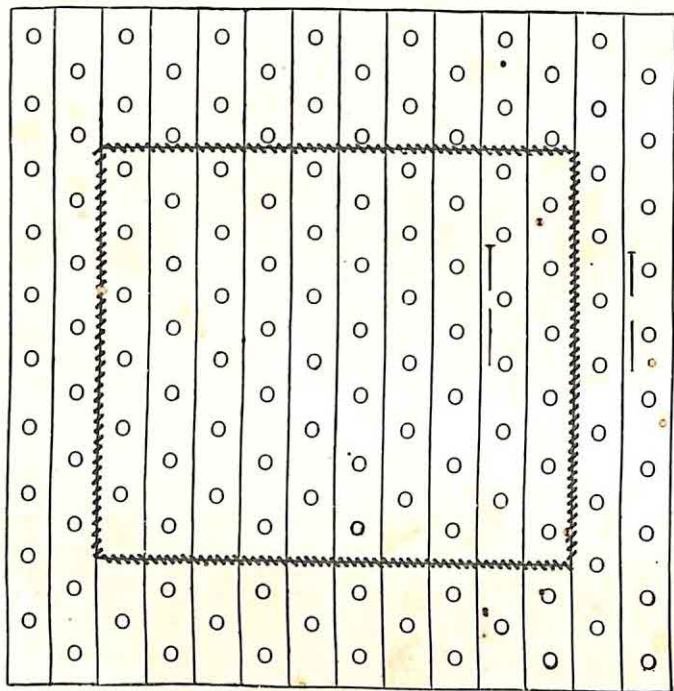


FIG. 76.

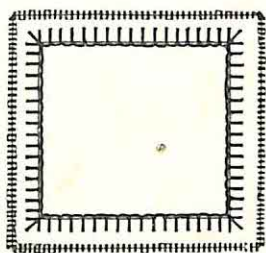
larger piece of stuff, to represent a torn garment, and when they have done this, tell them to place the garment piece with the right side uppermost, and the selvedge running up and down; (b) show them how to place the selvedge of patch to selvedge of garment, and lay it well over the hole, and then put stripe to stripe and endeavour to

match all other parts of the pattern, as perfectly as possible; (c) then show them how to fix the patch, turning in the selvedge sides first, and then the woof; placing the patch on the garment continually to see that the fixing does not interfere with the matching of the pattern, and cutting away the turnings, if more than three-eighths of an inch deep; (d) tell girls they ought to know how to tack the patch on, by beginning on a selvedge side, and keeping the material quite flat, so as to see the pattern of both garment and patch; (e) illustrate the patch placed over the hole, and tacked; (f) recapitulate the method of seaming, beginning on a selvedge side, and pressing the edges of patch and garment together most carefully, in order to preserve the matching, and holding the patch towards you while working, so as to tighten it, the thumb having a tendency to push the patch upwards to the edges of the creased garment.

3. *Seaming*.—(a) When this has been clearly demonstrated, tell girls to begin seaming, and to put a few extra stitches at the corners for strength; (b) illustrate the seaming stitches on the diagram (Fig. 76).

N.B.—Or fix the patch completely, and work all the stitches afterwards.

4. *Fixing, continued*.—(a) When the seams are finished and neatly flattened, tell girls to turn their work to the wrong side, and show by the illustration, and your own work, how to cut up to each corner, as far as the turnings



Wrong Side

FIG. 77.

of the patch, and then cut away the lappets quite evenly; (b) elicit that the hole is made much larger, and that there are double raw edges on all sides; (c) illustrate the wrong side (Fig. 77).

5. *Overcasting Stitches*.—(a) Demonstrate by the fold at the top of the frame, how to pass the needle up under the double edge of a selvedge side, about four threads, draw the needle out and make a half knot at the bottom, as in one method of fast-

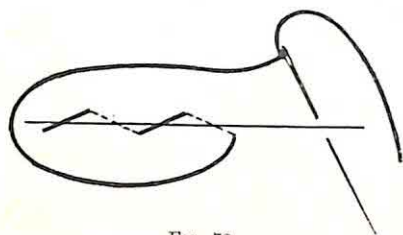


FIG. 78.

ening on buttonhole stitch, then hold the cotton coming from this stitch under the left thumb, and put the needle in four threads from the raw edges vertically (being careful not to catch in the patch), and a little distance from the preceding stitch, draw the needle out under the raw edges, rather loosely, thus making a knot at the bottom, and a connecting curved loop of cotton, between the stitches; (b) illustrate on the slate, and tell girls this is called *blanket stitch* (and *embroidery buttonhole stitch*, when used to protect scalloped edges of a garment, or of embroidery); (c) tell girls to hold the work with raw edges towards them, and to fasten on at one selvedge side, as you did on the frame, and then work with them for a few more stitches, and they will soon be able to overcast the edges loosely and evenly; (d) illustrate on the wrong side, and examine girls' work at intervals (Fig. 79).

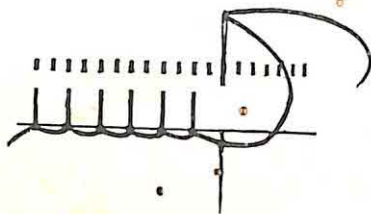


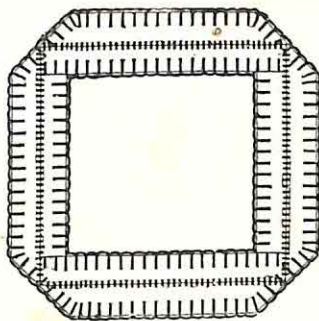
FIG. 79.

N.B.—If the cotton is drawn up to the raw edges too tightly, they get rolled into lumps, and if the raw edges are held upwards, like a buttonhole, the girls are certain to draw the stitches too much. Blanket stitch is useful for overcasting serge material, as well as print.

6. Another method of overcasting is to seam the two raw edges together, beginning the stitches at the left-hand side, and leaving a space between each stitch. This is a dressmaker's method of overcasting seams of print and other materials (Figs. 77 and 78).

N.B.—The above is the simplest and strongest method of patching print, and other dress materials.

Notes.—1. Another method of fixing the wrong side is to cut the garment up to each corner, then cut off the torn material to within a quarter-inch of the edge, and fold it back on to the garment, thus revealing the turnings of the patch inside, and making an octagonal figure outside the square or oblong formed by the patch. The raw edges being flattened and overcast, separately (Fig. 80). The objections to this method are the weakened corners, by cutting the stuff so close to the seaming stitches, and the extra overcasting. The advantage is its flatness and smoothness, when the article is ironed.



Wrong Side

FIG. 80.

2. The French and Belgian method is to cut away all the worn and torn part of the garment, then to make a turning on the garment, mitring the corners, and fitting the patch into this hole, matching the pattern exactly, and turning back a fold on the patch, which is tacked to the edges of the garment, as

for an ordinary seam, and then seamed on the wrong side, the raw edges being separately overcast. The seaming when pressed scarcely shows at all on the right side; and when the matching is perfect, the patching is really invisible.

THE GUSSET

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—The Paragon Frame, or three pieces of material much larger than the girls' sewing needle, tacking and sewing cotton, scissors, a garment, such as a shirt, a shirt blouse, a sleeve (a chemise or night-shirt sleeve, or infant's shirt, to show other kinds of gussets), slate and chalks.

For the Class.—Two strips of calico to represent (when they are joined together) the garment, and a triangular piece of material for the gusset, sewing needle, tacking and sewing cotton, scissors.

Method.—1. (a) Show the use of the gusset by a finished garment, pointing out that it is put at the end of sew-and-fell, and run-and-fell seams (sometimes at the end of a folded crease, such as at the bottom of an infant's closed shirt, where one side is not joined, but simply folded, or hip openings of children's knickerbocker drawers), to prevent them from breaking away, and to finish them off neatly and strongly; (b) show a single triangular gusset, put into an infant's shirt armhole, and explain that it is used here to form the sleeve, as well as to strengthen the end of the armhole; or a square gusset set into a chemise sleeve, or a night-shirt sleeve, to add to the width, as well as to strengthen.

N.B.—The square gusset forms a triangle when folded.

2. *Fixing the Seam and Hems.*—(a) Tell girls to find the selvedge of the two strips, and recapitulate the fixing of a *sew-and-fell*, or a *run-and-fell* seam for an inch and a half at one end; when the girls have finished the stitches on this, illustrate the join on the board (Figs. 85 and 86), examine their work, and demonstrate the fixing of the opening, which might be considered the opening of the body of the shirt, or the wrist-opening of a sleeve; (b) show how to fix the side with the single fold by turning down a narrow hem and bringing it to a point at the top of the seam, and neatly tack it; (c) the opposite side of

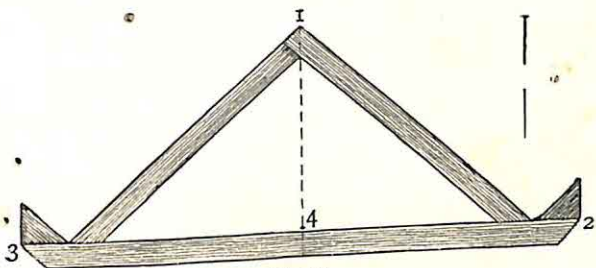


FIG. 81.

the opening is more difficult to manage, because of the double fold which forms the fell); show girls how to cut from the raw edge towards the fold, so as to be able to turn this fold back to the wrong side, and fix this side for a hem to match the other side, and neatly tack; (d) examine girls' work; (e) illustrate the tacked hems (Fig. 86).

3. *Fixing the Gusset.*—(a). Draw illustration of triangle on slate; (b) tell girls to find the selvedge side of the triangle, and turn down a narrow fold once, then turn down a fold on the other short side, then a fold on the longest side, which is on the cross, being careful not to stretch it; (c) illustrate the appearance of the gusset, and

examine girls' work ; (d) show them how to fold the gusset in half from the apex downwards, to see if the fixing has been even, and to get the apex in the middle ; (e) illustrate this crease by a dotted line (Fig. 81), and examine work.

(N.B.—If the fixing has been uneven, give a fresh gusset.)

(f) Show how to fold the point No. 1 down to the raw

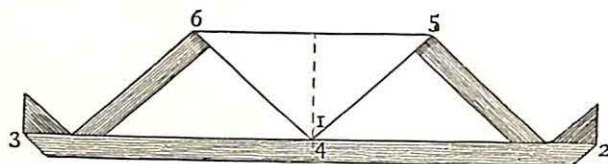


FIG. 82.

edge of turning, and mark this spot No. 4 on the slate

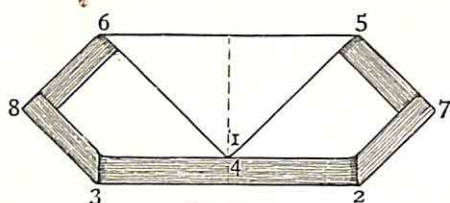


FIG. 83.

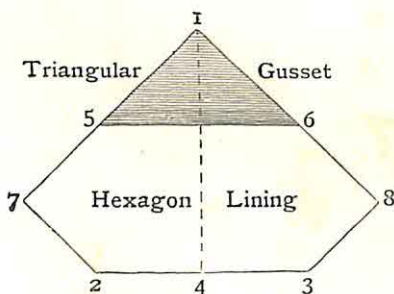


FIG. 84.

diagram ; (g) tell girls to do the same, while you illustrate the appearance (Fig. 82) ; (h) elicit that this forms a three-sided figure, a triangle, only smaller than the first triangle, and that now it has a lining at the back ; (i) explain that the lining must be made into a geometric figure, called a hexagon ; (j) show girls how to turn up corner No. 2 to point No. 5, on the wrong

side, examine their work, and tell them to show you how to turn up No. 3 to No. 6 ; (k) show the girls how to cut away

corners Nos. 2 and 3, leaving folds to match the depth of

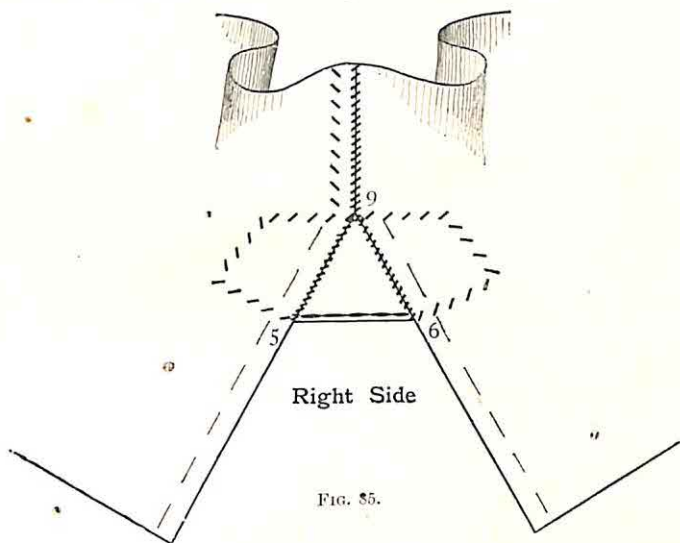


FIG. 55.

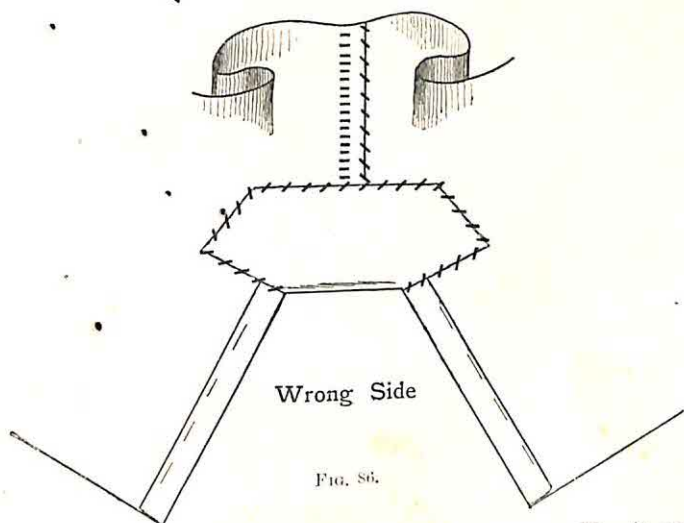


FIG. 56.

the other turnings, and number the new corners No. 7 and

No. 8; (*l*) illustrate on the slate the right and wrong sides of the triangle and hexagon combined (Figs. 83 and 84). The gusset is now ready to be fixed to the garment.

4. *Fixing Gusset into Garment.*—(*a*) Show girls by slate and Paragon, or your own specimen of garment, how to place No. 1 of the triangle to the end of the garment seam, and close to the seaming stitches, point No. 9, and

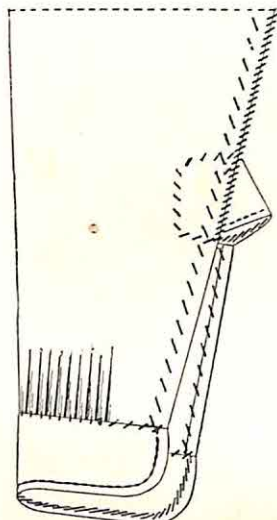


FIG. 87.

then how to tack the gusset to the edges of the opening very carefully, from No. 9 to No. 6, and then from No. 9 to No. 5, so as to keep the apex of triangle in its place; (*b*) show girls how to begin the seaming at No. 5 and seam to No. 6, being careful to put a few extra stitches at No. 9; (*c*) illustrate the seaming stitches on the right side (Fig. 85), and while girls are working the seam, draw an illustration of the wrong side (Fig. 86); (*d*) examine girls' work, and when they have all reached point No. 6, tell them to flatten the seaming stitches, and show them how to fix the

lining, or hexagon, on the wrong side, using another needle and tacking cotton, and fastening needle with sewing cotton to the work; (*e*) tell girls to turn work to wrong side, and place the crease in the middle of the hexagon to the middle of the seam, and tack it, being careful to keep the sides quite even, and pulling the line Nos. 2 and 3 of hexagon, to make it lie quite flat over the full and bulky part of seam; (*f*) illustrate the lining (Fig. 86); (*g*) show girls how to bring the needle and

sewing cotton to the wrong side at No. 6, and fell the lining from this point to point No. 5; (*h*) while girls are felling illustrate the stitches on lining; (*i*) when point No. 5 is reached show girls how to bring needle through to the right side at No. 5, and stitch the top of gusset along the crosswise edge, as far as No. 6, telling them to be careful to stitch near the edge, and not to stretch this part of the gusset too much; (*j*) show them how to fasten off neatly, and press the lining firmly with either thimble or thumb; (*k*) illustrate the felling and stitching, on wrong and right sides (Figs. 85 and 86), and a gusset set into a sleeve or body of shirt (Fig. 87).

Note.—The gusset should be divided into at least two separate lessons.

CHAPTER XIII

RUN-AND-FELL SEAM—BUTTONHOLES—MARKING

RUN-AND-FELL SEAM

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Two pieces of calico or muslin, needle, tacking and sewing cotton, slate, chalks, Frame, finished garments.

For the Class.—Two pieces of calico or muslin, needle, tacking and sewing cotton.

Method.—1. (*a*) Show by a finished garment, such as a child's muslin pinafore, that a *run-and-fell* is used instead of a *sew-and-fell*; (*b*) explain that if this kind of seam is very well done, it saves time in fixing and in working, and

is quite as strong and neat as sew-and-fell; (c) tell girls that this method of joining material with raw edges is most suitable for such materials as muslin, Nainsook, fine calico, and that a run-and-fell, like a sew-and-fell, is placed at the side seams of garments, and also across the woof, as when repairing a garment by putting a new top or bottom to it; (d) write the title of the lesson on the slate.

2. *The Fixing*.—(a) Recapitulate the way of finding the

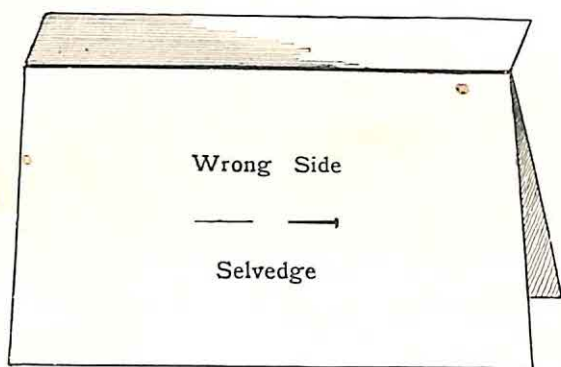


FIG. 88.

selvedge of both pieces of material, and tell girls to put a mark, or a pin to indicate it; (b) show girls how to turn down a fold about a quarter of an inch deep, telling them to work with you and to crease the folded edge firmly and evenly, and to turn this fold upwards, so as to show the crease; (c) illustrate on slate (Fig. 88), and examine girls' work; (d) show how to place the second piece of material upon the first, with the selvedge edge a little distance below the crease and running parallel to it, then how to turn the fold of the first piece down over the second, without rolling its raw edge; (e) illustrate on slate

(Fig. 89), and examine; (*f*) show girls where to begin to tack the three thicknesses by a mark on the illustration, and by your own work.

N.B.—The tacking should be neat and secure, and should lie just above the raw edge of the fold (Fig. 89); examine girls' work, when tacked.

3. *The Stitches.*—(*a*) Recapitulate the running stitch on the Frame, the girls working with you; (*b*) show how to fasten on just below the raw edge, as for *gathering*, and then

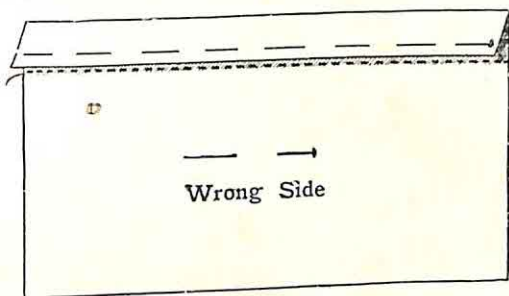


FIG. 89.

proceed with the running stitch, being careful to tell the girls that these stitches must be taken quite through the double material, and that at certain regular intervals a back stitch is advisable to make the seam firm and secure.

(*N.B.*—The objection to *run-and-fell* is always on account of the running, which, if carelessly done, leaves gaps in the seam.)

(*c*) Illustrate the stitch (Fig. 89), and examine girls' work; (*d*) when the running stitch is finished, then show girls how to press the fell down smoothly and evenly to hide the raw edge, and recapitulate *felling* on the Frame, eliciting how it should be fastened on and worked; (*e*) illustrate the felling stitches (Fig. 90), and examine work, both on wrong and right sides, and pull the seam to see if the material is firmly joined, and condemn *slip-shod* work.

N.B.—The seam on the right side must be one straight crease.

Notes.—1. By the above method of fixing, the running stitches can be kept more regular, and no raw edges can possibly be seen on the right side.

2. Another method is to turn down a fold on one piece and lay the second piece on it, with the raw edge just below the folded

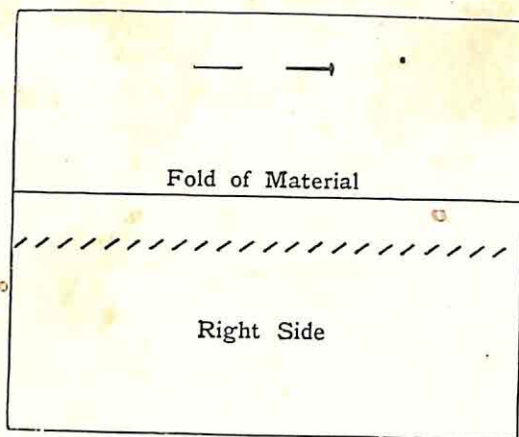


FIG. 90.

edge of the first, and then tack the double material along by the raw edge of the fold, which cannot be seen, but only guessed at, because it is covered over. By this method the running stitches are often irregular, and the raw edge is frequently seen on the right side, beside the possibility of slip stitch running.

BUTTONHOLES—AND MARKING

THE BUTTONHOLE WITH BOTH ENDS BRACED

Class.—Older Girls, Pupil Teachers and Students.

Apparatus.—*For the Teacher and the Class.*—The same as in previous lessons on the buttonhole, and marking a letter.

Method.—(a) Recapitulate by means of the Frame the buttonhole stitch, and let the girls work it on the canvas samplers, and then the method of working the round corner, and the braced end, illustrating on the chequered board and slate (b) when the girls have renewed their knowledge of working the buttonhole, in this way, show them how to work the two sides of the slit, before finishing the corners, beginning at the left end of the band, and when this end is reached again, recapitulate by Frame

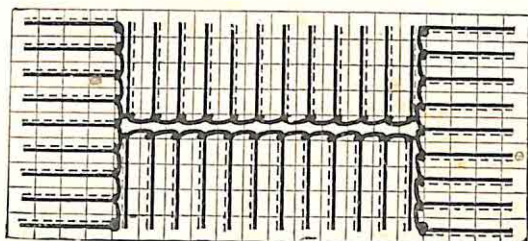


FIG. 91.

and illustration the method of *bracing* it; (c) when this corner is braced, show girls how to pass the needle between the canvas and its lining, and bring it out, at the right-hand end of the slit, at the side of the corner, which will enable them to work from left to right; (d) illustrate the completed buttonhole, and show girls that this kind of buttonhole is used for the front of day shirts, and on women's dress bodices, and is really the strongest method of working an ordinary-shaped slit; (e) when girls have worked the slit on the canvas, recapitulate the process of making a band, cutting a slit on it to fit a button, and the whole of the method of working a buttonhole with both ends braced (Fig. 91).

N.B.—1. It takes some girls a long time to master the buttonhole stitch, and the method of making the corners, so a good plan is to give older girls a six-inch square of double

material, on which they can practise stitching, feather-stitch, chain-stitch, knotting; by marking off the surface into squares, within which buttonholes can be cut, the warp and woof way, and sometimes on the cross.

2. Buttonholes for children's and women's frock and dress bodices should be cut away at the corners nearest the edge of the hem, and then worked round, to allow of a button with a shank fitting the hole easily. Tailor-made dresses and jackets have buttonholes of this description.

CHAPTER XIV

WHIP-STITCH, AND SETTING ON A FRILL

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—The Paragon Frame (when making the stitch or setting on the frill), Mull muslin, or Nainsook, one inch deep and six inches long, and a piece of calico three inches square, chequered board, slate, chalks, needle, tacking and sewing cotton, pins, scissors, Demonstration Frame, with a roll placed on the folded edge, to represent the fold on the material, and some garments trimmed with hand-made frills.

For the Class.—A three-inch square of calico, and a strip of Nainsook 1 × 6 inches, needles, tacking and sewing cotton, and pins (or a strip of print, or embroidery).

Method.—1. (a) Tell girls that hand-made frilling is a very economical way of making trimming for a night-gown, chemise, drawers, children's pinafores, pillow-slips, and that a quarter of a yard of Nainsook, which costs 3d., will fully trim a night-gown; (b) recapitulate the method of making, tacking, and dividing a band; (c) illustrate it on the board (Fig. 92); (d) show girls how to fix the

muslin which is to form the frill thus :—First tell them to find the selvages, and show them how to fix a very narrow flat hem on the two selvedge sides, which are the short ones, and tack them ; then tell them to fix one long side, being very careful with the corners, and to hem these three sides very neatly ; when the hems are com-

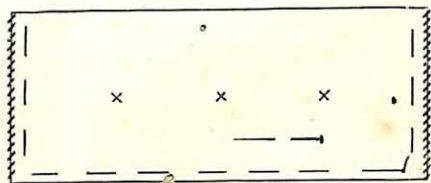


FIG. 92.

pleted, show girls how to divide the frill into halves and quarters for the sake of regulating the fullness, and then show them how to put a few stitches at these divisions, and then how to hold the wrong side of strip towards them, and fix a narrow hem at the right-hand end, and then fasten up this corner by seaming, and work a few hemming stitches. (This has been found a very

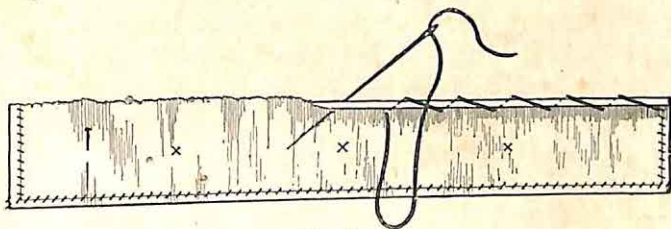


FIG. 93.

advantageous method for setting the frill on the band neatly, and for preventing the raw edges, when rolled, coming out at this end into a sharp point.)

Next show girls how to form the roll, by placing the material between the left thumb and forefinger, in a slanting position, and rubbing it downwards and upwards with the left thumb, till the raw edge is completely

hidden, and a good firm roll is obtained. (The roll should not be too deep, nor too narrow; it is absurd to state the number of threads.)

N.B.—The girls should be allowed to practise this rolling of raw edges on short waste pieces of material, before they make the roll on the specimen frill. When the girls have rolled about one and a half inches, illustrate (Fig. 93) and then demonstrate the way to make the stitch on the frame.

2. *The Whip-Stitch.*—(a) Explain that the stitch makes the roll on the material look like a *whip-cord*, and that this is probably the origin of the name of whip-stitch; (b) fasten the cord to the right-hand side of Frame, so that it comes out to the front towards you, then tell girls to count with you eight strands to the left on the Frame, and show most clearly that you put the needle to the back of the roll, and quite under it, in a slanting direction to the left, so that the cotton can be drawn up easily; (c) elicit that you have made a very long slanting stitch on the top of the roll, and a short stitch under it; (d) illustrate on the chequered board the shape of the stitch thus:—Put a dot in the space on the right-hand side and mark it No. 1, then tell girls to count up two lines with you to represent the roll, then count eight lines to the left, and put a dot in the space and mark it No. 2, then count two more lines to the left and two down and mark it No. 3; tell girls to watch, while you draw a slanting line from No. 2 to No. 1, and a short dotted slanting line from No. 2 to No. 3 (Fig. 94).

(*N.B.*—The short dotted line may be straight, if it is preferred to put the needle in straight. It is, however, found much easier, while holding the frill in a slanting position, on the left fore-finger, to put the needle in slanting.)

(e) Tell girls to take up frill and work the stitches, while

you demonstrate on the Frame and on the slate (Figs. 93 and 94), being careful to examine their work, and to question them as to the reason of putting the needle quite *under* the roll, and not through it; (f) when the first one and a half inches are whipped, again demonstrate the method of

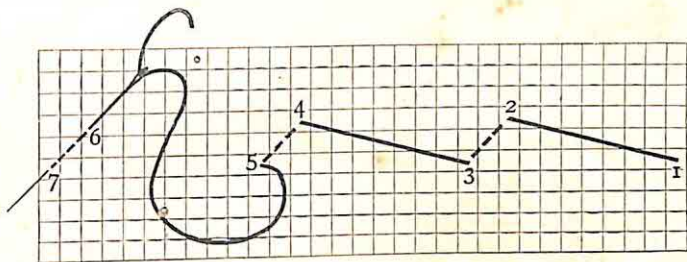


FIG. 94.

rolling to the next quarter of the frill, and recapitulate the working of the stitch; (g) tell girls to roll to the next half of frill, and work the stitches as far as the hem, while you show on the slate what the material will be like when

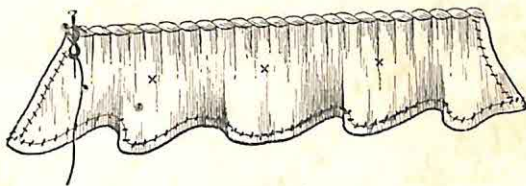


FIG. 95.

fully drawn up (Fig. 95); (h) show girls how to draw the muslin up to form the frill, the same length as the band, and put in a pin at the left end, and wind the cotton round it, as for gathers. Examine the girls' work, and explain that this word *frill* is connected with *full*.

3. *Fixing the Frill on the Band.*—(a) Show girls that

the right side of band must be placed uppermost on the desk, with folded edge towards the top; (b) tell them to place theirs in this way, then show them how to place the *whipped* edge of frill, with the right side downwards, and

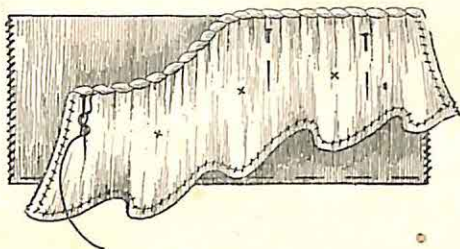


FIG. 96.

thus facing the right side of the band, quite close to its folded edge; (c) examine girls' work, then show them how to pin the right and left hand ends of frill to the band, then how to regulate the fulness by matching the divisions

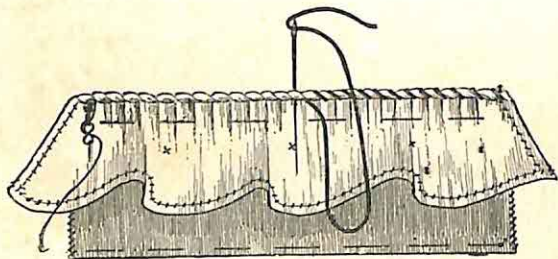


FIG. 97.

on frill with the divisions on band, and putting in pins in these places (or fasten one-half of frill to band, and illustrate thus far, letting girls finish the other half in the same way, without any help, Fig. 96), then let them *tack* frill to the band, and remove the pins (Fig. 97).

4. *Setting-on Stitch*.—(a) Show girls how to hold frill

towards them, and then how to fasten the right-hand end by seaming the hemmed portion of frill to the band; (b) when girls are quite ready, show by the Paragon, or by your own whipped frill, how to put the needle in quite *straight* under the *middle* of each roll, so that the stitch is the same as seaming, and the slanting portion of it rests between the rolls, while the straight stitch lies under the roll, and is seen on the right side; (c) illustrate the appearance of stitches on the slate, and the position of needle for making

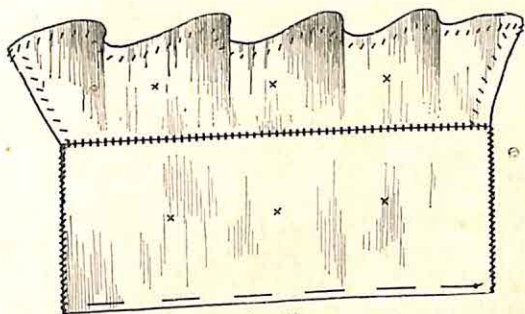


FIG. 98.

the stitch (Fig. 97), then recapitulate, the girls working with you; (d) examine their work frequently.

- N.B.*—1. Some people think it neater to put the needle through the middle of the roll, and not under it.
 2. Whichever method is used, the frill, when sewn to the band, should be flattened like a seam.
 3. Some people also recommend stroking a frill, but the author objects to this process, because girls are likely, however carefully they have been taught, to mark the muslin with the pin.

5. *Fastening off.*—(a) When girls are getting near the last pin, demonstrate to them collectively, how to unwind the whipping cotton, and to finish off the frill by a narrow hem, as at the commencement, seaming the end, and break off the whipping cotton, then continue the setting-

on stitch, seaming this hemmed portion very firmly and neatly to the edge of the band; (*b*) take out tacking threads, and flatten the frill at its edge, and pinch it between finger and thumb to keep the fulness in place; (*c*) tell girls to take out marks of division on the frill and on the band; (*d*) illustrate the appearance of the right side on the slate (Fig. 98).

Notes.—1. Whipping cotton must be very good and strong, and yet fine to suit the muslin.

2. The girls' hands must be particularly clean, before beginning to roll the material.

3. Muslin, Swiss, Madeira, Irish embroidery, and dress material can be whipped at the edge, and set on bands, and front folds, as by above methods.

4. Some people like to hold the band towards them, while seaming the frill to the band. It is not such a good method in practically trimming a garment, as the frill cannot be so easily regulated to the divisions on the band, for it is not always possible to tack the frill to the band, completely.

5. Materials for frills must be cut across the woof: the depth is always the selvedge way of the stuff. The roll for the whipstitch must be made on the *wrong* side of the material. The girls should learn how to make frills, on dress material, *e.g.* print, drill, to form trimmings for sleeves of pinafores, frocks, and flounces for skirts, and collars of blouses.

6. Fine calico whipped makes most excellent frills, and can be used instead of muslin.

CHAPTER XV

FLANNEL BINDING, AND SEAMS IN FLANNEL

FLANNEL BINDING

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher and Class.*—A square of flannel (white or coloured) binding to match the colour of flannel, needle, tacking and sewing cotton.

N.B.—Slate and chalks for teacher, and a flannel garment, *e.g.* infant's barrowcoat, or head flannel.

Method.—1. Show girls by the garments that the raw edges of flannel are generally bound with sarcenet ribbon,

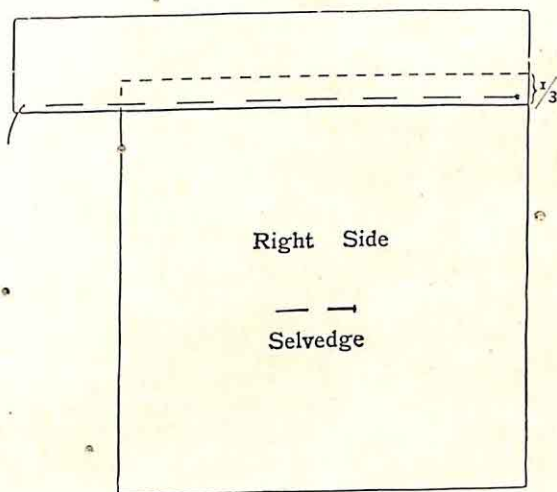


FIG. 99.

galloon, or a kind of thin tape called *flannel binding*, and that the binding is neater and more ornamental than a herring-Boned hem.

2. *The Fixing.*—(a) Show girls that the binding material is nearly always put on, merely to show a little way over the edge on the right side, and in order to fix it properly it is necessary to divide the binding into thirds; (b) show the girls how to divide the binding by creasing one-third of it quite evenly, and when they have done the same, demon-

strate clearly how to lay the wrong side of the binding on to the right side of the flannel over the raw edge (beginning with the selvedge side first), without rolling the edge of the flannel; (c) let the girls find the right side of their flannel, and the selvedge of it, and tack the binding neatly along one selvedge side; (d) illustrate the appearance (Fig. 99), and examine their work; (e) show the girls how to turn the corner of the flannel, so as not to pucker the binding, by making a pleat in the binding from left to right, and put in a small pin till the binding is tacked to the flannel; (f) tell girls to hold the binding rather tightly in the left hand while fixing, and the flannel loosely, so as to prevent puckering, and to allow the binding to lie quite flat and

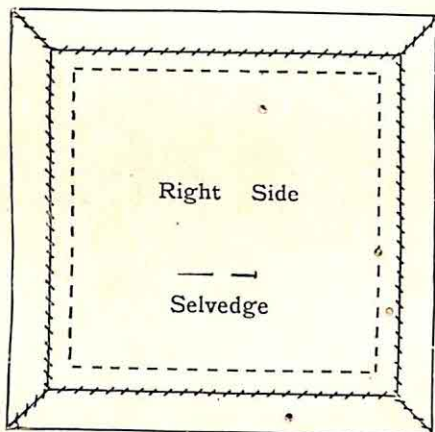


FIG. 100.

smooth without wrinkles; (g) illustrate the corner (Fig. 100), and examine girls' work; (h) let them tack the binding on the woof side, while you examine frequently, and then show them once more how to turn the corner by pleating the binding as above; (i) let the girls fix the other sides without any help, while you examine and illustrate the appearance of the specimen on the right side (Fig. 100).

3. *The Stitches*.—(a) Show girls how to begin in the middle of a selvedge side, and hem neatly as far as the

corner, show them how to slip the needle up to the top of the pleat, and hem it down; the needle and cotton will then be in a position to hem the next side.

(*N.B.*—If fixed for machine sewing, the binding must be stitched close to the edge.)

(*b*) When all the sides and corners are neatly hemmed, show girls how to turn the work to the wrong side and tack, and then neatly run the binding just above its edge, being careful to fasten the corner pleats in the same way as on the right side, and not to draw the flannel binding too vigorously over to the wrong side, so as to roll the edges.

(*N.B.*—Some allowance must be made for the thick edges of the flannel, so that there will be less than two-thirds of the binding on the wrong side. The binding is often ornamented with feather-stitch above the hemming on the right side. The join in the binding should, if possible, be made by a pleat at a corner.)

(*c*) Illustrate the wrong side of the binding, and examine girls' work often.

Notes.—1. The chief fault is putting the binding on too loosely, thus giving it a very wrinkled appearance, and also too deep on the right side. Half the width of the binding is sometimes preferred, but it is less neat in appearance than a third of the width. Other faults are:—(1) Leaving the pleats at the corners unfastened; (2) not placing the binding far enough down from the raw edge of the garment, thus causing it to break away when the flannel is washed.

2. Binding enters into the tailor's, dressmaker's, milliner's, and upholsterer's arts, and should be taught to older girls, not only on flannel, but on dress materials, chair and box covers, valances, and cloth petticoats. The latter are usually bound with braid in the following manner:—Place the braid about one-sixth or a quarter of an inch from the edge of the garment, with the right side facing the right side of the petticoat, then run and back-stitch the braid to the garment, a little distance from its own edge, and afterwards turn the braid to the wrong side, being

careful not to draw it over the edge of the garment too tightly, and fell, or run it neatly.

3. *A corner in flannel binding.*—In turning a corner, fold the binding towards your right hand, creasing it quite evenly over the edge of flannel, at right angles with the corner (*A*, Fig. 101). Now fold the binding back to the left, and even with the top edge, thus forming a diagonal from corner *A* to the depth of the binding. Open out the binding, and you will find a straight crease at corner *A*, and a diagonal crease from it to the left. Put edge of flannel under binding, and you will find that the diagonal folds fit beautifully at the corner, both on the right and wrong sides (Figs. 101 and 101*a*).

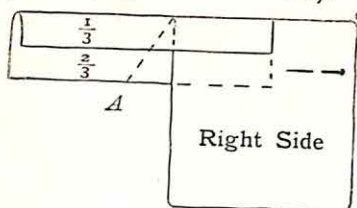
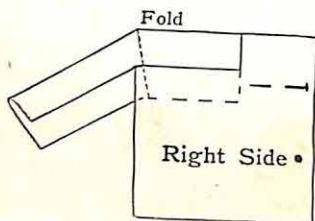


FIG. 101.

FIG. 101*a*.

SEAMS IN FLANNEL GARMENTS

A. FLANNEL PETTICOAT

Method.—1. (*a*) Find the selvages, right sides, and the way of the nap of both breadths; (*b*) then put in pins with points downwards, in the same direction as the nap;

(c) face the breadths by placing the two right sides together, the edge of the upper breadth being a quarter of an inch lower than the edge of the under breadth (Fig. 102);

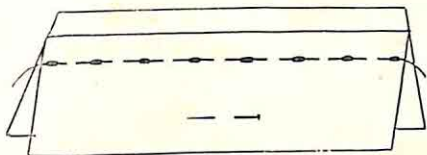


FIG. 102.

(d) tack both together firmly and neatly a quarter of an inch below the raw edge of the upper breadth; (e) fasten the breadths together by run and back-stitch, being careful only to make two, or at most three run stitches, and then a back-stitch, which must not, however, be taken two or more threads forwards, as in ordinary stitching, or gaps will be left in the seam, and will produce bad results on the right side.

N.B.—This part of the work must be done most carefully and strongly, for nothing is condemned more than great gaps in flannel seams, produced by careless run and back-stitches on the wrong side (Fig. 102).

2. (a) When the join is completed by the run and back-stitch, flatten the

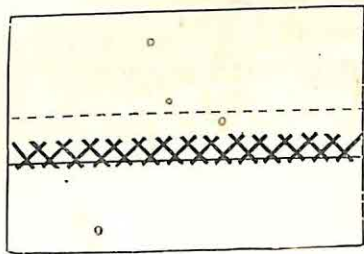


FIG. 103.

seam by pressing under from the right side, and turn down the deeper raw edge of the underlying breadth over the stitches to form a fell; (b) tack along the edge without puckering the fell; (c) her-

ring-bone the raw edge neatly and securely, taking all the stitches quite through to the right side (Fig. 103); (d) take out tacking threads and press well.

N.B.—This is considered the strongest way of joining flannel breadths.

B. BARROWCOAT, OR BODICES, OR VESTS

Method.—(a) Find the selvages, right sides, and way of the nap, and face the breadths, as described above; (b) place the selvages quite close together, and tack three-

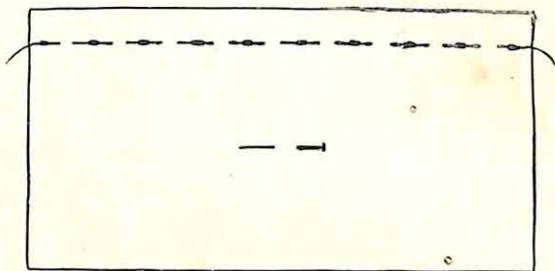


FIG. 104.

eighths of an inch from the edges, neatly and firmly; (c) run and back-stitch as described in *A* along by tacking thread; (d) when the join is completed, flatten it, and place the single edges to the right and to the left, on the garment; (e) tack

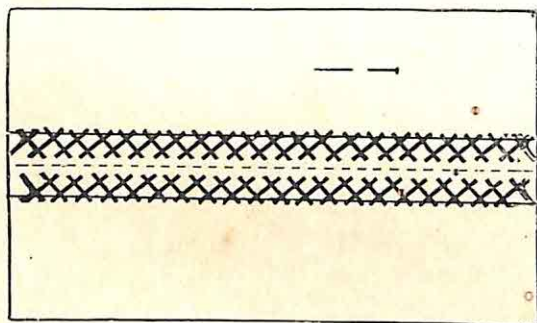


FIG. 105.

them firmly without puckering, or drawing the centre join too tightly; (f) herring-bone each side (Figs. 104 and 105).

N.B.—This makes a nice flat seam, but there is double work in herring-boning, and the centre join often gives way, after the article is washed, unless it is back-stitched frequently.

C. ANOTHER SEAM IN FLANNEL.

Method.—The same as in lesson B as far as (f), when, instead of herring-boning each raw edge, the herring-bone stitch is worked over the centre join.

N.B.—This protects the centre join, but leaves the raw edges unprotected. The author does not recommend it.

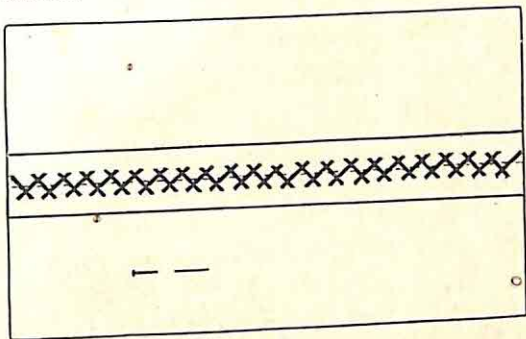


FIG. 106.

CHAPTER XVI

VARIOUS METHODS OF MAKING SEAMS ON CALICO,
LINEN, MUSLIN

MANTUA-MAKER'S HEMMING (Fig. 107).

Method.—(a) Turn the garment to the wrong side and place one raw edge a little below the other; (b) turn the upper edge over the lower twice, as in fixing a hem, and hem through all the thicknesses.

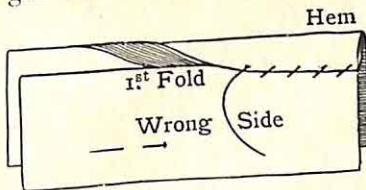


FIG. 107.

N.B.—The stitches are only seen on the wrong side.

Use.—It is a quick and useful method of joining sides of muslin and print pinafores, skirts of white calico and cloth petticoats, bags, and sleeves that have no linings.

BODICE SEAMS (Fig. 108)

Method.—(a) Place the two raw edges quite even on the right side, and tack about a quarter of an inch deep;

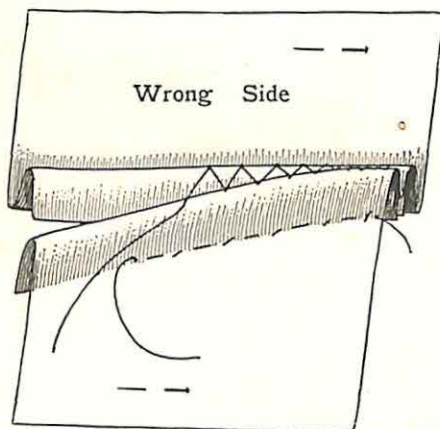


FIG. 108.

(b) run and back-stitch neatly and firmly just above the tacking thread; (c) take out tacking cotton, and turn the garment to the wrong side; (d) press up the edge that has been fastened by run and back-stitch, and tack just below the raw edges, which are on the wrong side, *i.e.* about one-quarter of an inch deep; (e) run and back-stitch or machine-stitch, along by the tacking threads.

N.B.—The stitches are not seen on the right side.

Use.—(a) To join the various parts of a calico bodice; (b) sides of muslin and print pinafores, frock

bodices, skirts of petticoats and frocks; (c) for materials that fray very much, *e.g.* serge, and which are not strongly enough protected by over-casting.

GERMAN HEMMING

Method.—(a) Turn down the raw edges of both sides of the material once, on the wrong side, rather narrow, and quite even; (b) place the right side of one piece on to the wrong side of the first, so that the folded edge of the second lies just below the raw edge of the first, or under piece; (c) then hem the folded edge of the second piece to the single material lying under, from right to left, so that it is like hemming upside down; (d) when this edge is hemmed, put your hand up the garment, and flatten the seam, from the right side, and then turn down the first fold over the second, and fell it neatly.

N.B.—This is a very neat substitute for sew-and-fell, when a very flat seam is desirable. It is somewhat like counter-hem.

Use.—For seams of chemises, nightgowns, shirts, and petticoats. It is quite as strong as the older method of sew-and-fell seam, and looks better, when well done, because all the stitches are worked on the wrong side.

GERMAN SEAMING

Method.—(a) Place the two selvages together, edge to edge, on the right side, and lay them quite flat on the left forefinger, and begin to work from top to bottom; (b) fasten on the cotton by bringing the needle through one edge from the under or wrong side to the right, and leave an end of cotton hanging towards the worker; (c) then place the needle in a slanting direction *under* the opposite

edge, and the fastening-on end, about two or three threads from the last stitch ; (*d*) now place the needle under the opposite edge and *above* the fastening-on end of cotton ; (*e*) proceed in this way till the seam is finished. It must lie perfectly flat.

Use.—This seam is used for the selvages of sheets, pillow-slips, narrow selvages of trimmings, *e.g.* embroidery, Mull muslin frilling, everlasting edging, and lace.

N.B.—The cotton crosses itself, between the two selvages.

COUNTER-HEMMING OR FELLING

Method.—(*a*) Place the two wrong sides of the material together, edge to edge ; (*b*) turn down, towards you, an eighth, or a sixth, or a quarter of an inch, according to the depth required, on the right side ; (*c*) move the piece lying uppermost away, and you will find the turning on this is on the right side, and the turning on the other edge is on the wrong side ; (*d*) place the edge which has the turning on its right side under the other edge, so that raw edges are completely hidden, and yet not rolled ; (*e*) tack along the centre ; (*f*) hem the fold on the right side ; (*g*) and then the fold on the wrong side. This also makes a very flat seam, but the fold of one hem, as well as the stitches, is visible on the right side.

N.B.—The same fixing, however, can be used, and the edges can be stitched on the right side.

Use.—This seam is very useful for children's shifts, for muslin pinafores, and at the shoulder seams of infants' first shirts, the Cottage Pinafore, and in flannelette,

CHAPTER XVII

STRENGTHENING TAPES—PIPING

STRENGTHENING TAPES

Use.—1. A strengthening tape is a substitute for a gusset, at the ends of seams and slits, especially in flannel garments, where gussets would be too bulky.

2. They are also used at the corners of the flaps in infants' shirts, boys' sailor collars, at the bottom of the armholes of the *Cottage* and other pinafores, and they are *shaped* when placed in these positions.

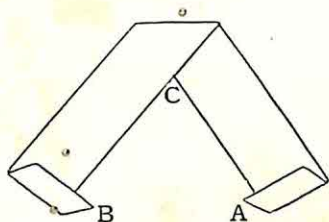


FIG. 109.

3. When placed at the bottom of the placket hole of petticoats, dress skirts, and front folds of shirts, night-

gowns, and chemises, they are put on quite *straight*.

Method.—1. *Shaped Strengthening Tapes.*—(a) The opening, at say the side of the flannel shirt, has been already fixed for a hem and herring-boned (Fig. 110); (b) turn down a narrow fold once at each end of the tape, but on opposite sides, so that one fold is on wrong side, and one on the right; (c) then turn the tape so that it crosses somewhere about half its length, and forms the base of an angle; (d) fold the tape again to see that the long sides are equal in length; (e) put a small pin or a few tacking stitches, to keep the crossed tape in position (Fig. 109).

N.B.—If you are using the tape from a long piece, and not a short end cut off, the fixing would be done while sewing it to the edge of the slit.

2. *Fixing Tape to the Garment.*—(a) Turn the wrong side of the garment towards you, and place the wrong side of the tape at C (Fig. 110) to the end of the slit or seam, and put in a pin; (b) then place A to the garment and put in a pin, and then B, and put in a pin; (c) measure the sides once more, to see that the tape is placed equally on

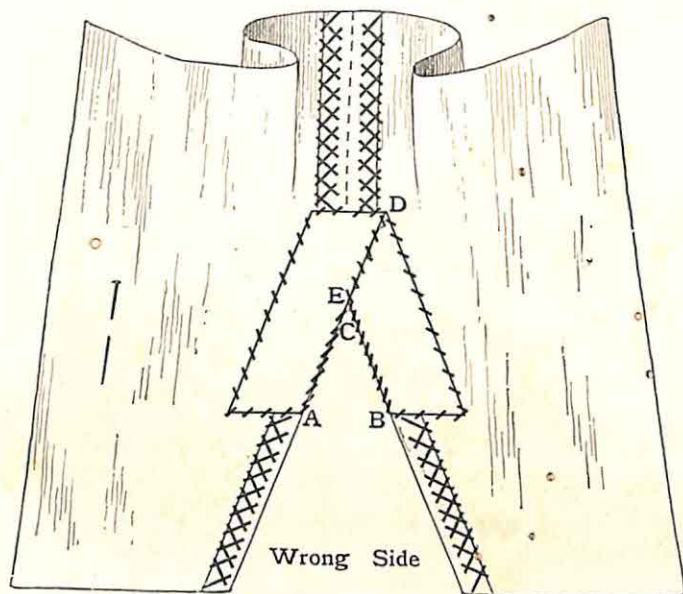


FIG. 110.

both sides of the slit; (d) tack the tape in position, and take out the pins; (e) seam the garment to the tape, *i.e.* hold the garment towards you and seam neatly from B to A (Fig. 110); (f) slip the needle under the tape at A, and bring it out in position for felling, and fell the tape to the garment as far as D, then fell the crossing piece of tape to that which lies under, and not through the material,

as far as E, then slip the needle back to D and fell on, till B is reached, where the cotton must be fastened off neatly and strongly; (*g*) flatten the tape by pressing it well between the palms of the hand; (*h*) illustrate on both right and wrong sides; the stitches must show through quite distinctly on the right side.

N.B.—1. If the shaped tape is put on to a calico or holland garment, the only difference in the illustration will be hemming stitches on the hems of the opening of the garment, instead of herring-bone stitches.

2. In placing the tape to a flannel garment, be careful to hold it tightly, while tacking, and the flannel loosely, as the latter will be tightened by shrinking in washing; in a calico garment the tape should not be held too tightly, or it will be puckered.

3. *Unshaped Strengthening Tapes.*—(*a*) Turn down a narrow fold at each end of the tape on its wrong side; (*b*) crease the tape in half across its width; (*c*) place the selvedge edge on the wrong side of the garment, over the end of the slit, the crease matching the middle of it, and then fell the tape neatly and firmly to the garment, being careful with the corners.

PIPING (Fig. 111)

Method.—(*a*) Cut strips of calico, or dress material, on the cross, sufficiently wide to admit the cord, and to form a false hem; (*b*) join these together as described in lesson on false hems on the cross, so that they are the proper length for the piping which is required; (*c*) place the piping cord on the crosswise strip, fully three-eighths of an inch from the edge, then turn this fold over the cord, and tack through the two thicknesses, pressing the cord up to the folded edge, tightly; (*d*) turn the corded edge towards you, and lay the wrong side of the

pipings to the right side of the garment, about a quarter of an inch from the top edge, and leaving half an inch beyond the side edge of the garment; (e) tack firmly; (f) then run and back-stitch the three thicknesses firmly together, the stitches being made just above the cord; (g) when it is run and back-stitched, fold the cording back to the wrong side, and press the garment evenly against it, at the top, to make cord set well at the edge; (h) the false hem is then folded under evenly once, and at the

Ball

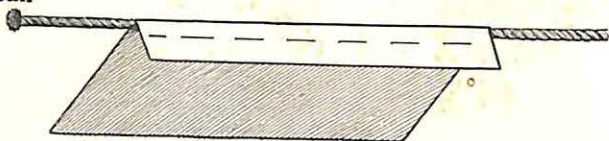


FIG. 111.

corners, and hemmed to the lining of the garment, or if there is no lining, quite through the garment itself.

- N.B.—1. If a string is used, as at waist and neck of infant's frock, or at neck of nightgown, the ends of the piping must be turned under to its own wrong side, and neatly stitched on the right side, to prevent them from being bulky or ravelling out, when the string is drawn through.
2. If the garment is to be fastened by button and buttonholes, hooks and eyes, then the ends of the piping can be felled neatly to the garment.
3. Piping is sometimes used without the false hem, when it is placed between crosswise strips of material equally, the raw edges being quite even, and tacked just below the cord. The piping is then placed on the right side of the garment, with the raw edges of piping close to raw edges of garment, and the lining of the garment is placed on the top of the cord, the raw edge close to the others, then tacked through all the thicknesses close to the cord, and afterwards stitched. The lining is folded back and well creased, so that all the raw edges are inside, and the cord is at the edge, between the right side of material and its lining. This method is used in piping yokes, and armholes, and lined frock bodices.

CHAPTER XVIII

ORNAMENTAL STITCHES USED IN PLAIN NEEDLEWORK :—

CORAL AND FEATHER STITCH—CHAIN-STITCH—FANCY
HERRING - BONING—BIASSING—KNOTTING—SCALLOP-
ING—SINGLE HEM STITCH—EYELET-HOLES.

CORAL AND FEATHER STITCH

Class.—Older Girls, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Demonstration Frame, slate, chalks, calico bands, flannel garments, crochet or embroidery cotton, or flourishing thread, flax, silk, wool, and suitable needles.

For the Class.—First lesson : lined or unlined canvas, afterwards bands of garments, flannel petticoat or head flannel, suitable needles, cotton, etc.

Method.—1. (a) Show how to hold the work over left forefinger, as for setting-in gathers, or over the same finger as for stitching. (in the following lesson the work is held in the first way) ; (b) show by specimens on garments, that *coral and feather stitch* are worked both on double and single material—on double material such as edges of bands, hems, and tucks, and on single material between tucks ; that when these stitches are worked on bands, they keep the edges firm and flat, and ornament them still more effectively than stitching would do ; and when they are worked on single material, they are used for ornamentation only.

2. *Fastening on.*—(a) Show how to bring needle from wrong to right side, between two selvedge threads, and

leave an end, which can be worked over, as in *marking*, or, if double material, slip the needle between the folds of band and secure by a back-stitch on the right side; (b) let class do the same; (c) examine.

3. *Coral-stitch*.—(a) Show how to count two threads to the right of where the cotton is coming out, and put the needle under two or more threads vertically, drawing the cotton down straight and putting it under the point of the needle; recapitulate, the class working with you; (b) show how to draw the needle and cotton out loosely, and explain that the cotton, flax, silk, and especially wool, must never be drawn tightly, or the material will be puckered, and, after washing, the stitches will be spoilt; (c) class draw out needles; (d) recapitulate by a diagram on sectional board, put a dot between two selvedge lines and call it No. 1, count two lines to the right and mark in the space No. 2, count down two lines and mark No. 3 in space, draw a slanting line from Nos. 1 to 3, and a straight line from Nos. 2 to 3, giving the appearance of a half-knot at No. 3 (Figs. 112 and 113); (e) tell the class to take up samplers, and work next stitch with you: count on the frame two threads to the left of where the cotton is coming out, draw cotton coming from last stitch down in a straight line, and put left thumb on it, then throw cotton to the left over the thumb, and place the needle under two threads vertically, and draw it out above the cotton, thus making a half knot, and a straight stitch; examine girls' work, and show by the frame that only the straight stitches can be seen on the wrong side;

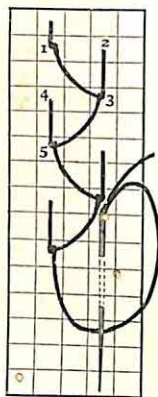


FIG. 112.

must match. If worked on the two edges of a collar-band or front fold, or from top of nightgown downwards, the pattern for each must be begun in the same direction; for instance, if the pattern of the outer edge of a front fold is fastened on at the top, and worked towards the point, then the pattern of the inner edge must be worked downwards as well.

3. In fastening on a new needleful of cotton (*a*) pass the used-up cotton to the wrong side, and weave the needle under

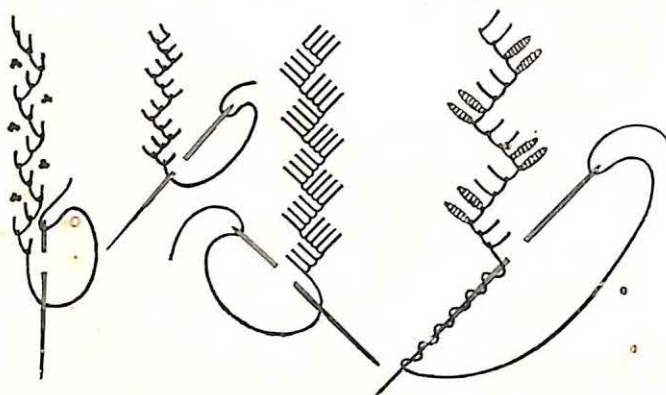


FIG. 114.

and over the straight stitches, as in back-stitching; fasten off by a back-stitch and cut the cotton; (*b*) pass the needle through the folds of double material, and secure it on the wrong side by a back-stitch, and then bring it to the right side, through the half knot of the last stitch.

CHAIN-STITCH.

Class and Apparatus.—The same as above.

Method.—1. Show the class by garments that this stitch is used to ornament the gathers on children's pinafores and frock bodies, collars of boys' sailor blouses, and the hem and tucks of flannel garments.

2. *The Chain-stitch.*—(a) Show how to hold the work as for darning, and explain that the stitch is worked downwards from top to bottom; (b) show by frame how to bring the needle through from wrong to right side, and leave a long end, which must be woven under the stitches on the wrong side, afterwards; (c) let class do this; (d) show them how to hold the cotton loosely on the right side, and then how to put the needle into the same place, where the cotton is coming out, and bring the needle out

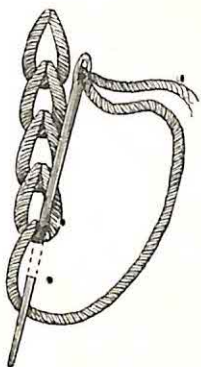


FIG. 115.

two threads below, above the cotton which forms a *loop* under the needle, draw needle out carefully, and let the cotton lie loosely in the form of a loop; (e) recapitulate, the class working with you; (f) illustrate on chequered board, thus:—mark the space where cotton came out No. 1, and where needle was put in on the right side No. 2, then count down two lines in a straight line, and mark the centre of space No. 3, draw a loop from No. 1 through No. 3 to No. 2; (g) let class work with you; show how to put the left thumb on the cotton, coming from last stitch, then how to put the needle back a little to the right of this place, and bring it out two or more threads below, *above the cotton*, which again forms a loop—draw needle out and let cotton lie loosely on the material.

(N.B.—Chain-stitch must be done very loosely. Each new loop begins within the lower part of the preceding one, and produces the effect of the links of a chain.)

(h) When girls have worked this stitch, recapitulate by drawing it on the sectional board; (i) question the girls on the use of the stitch and the method of making it,

and let one come out and work it on the frame, a second draw it on the board, and a third put the needle in position (Fig. 115).

FANCY HERRING-BONE STITCH

Method.—This stitch resembles that of the ordinary herring-bone, except that it is worked perpendicularly instead of from left to right, and the cotton is brought round behind the needle and under its point as represented in Fig. 116, which gives a greater finish to the stitch. As great care is requisite to keep the pattern even, it is a good plan to run a tacking thread, as a guide, down the middle of it. The stitches are four threads wide, and eight threads apart.

Use of the Stitch.—This stitch can be employed like coral, or feather stitch, to ornament edges of bands, hems, and tucks, especially for children's flannel garments, *e.g.* head flannels, barrow-coats, frocks, and petticoats.

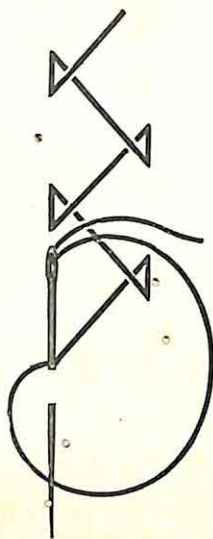


FIG. 116.

BIASSING

Apparatus.—Calico, flannel, or holland, sewing needles, piping cord, crochet cotton, flourishing thread and silk.

Method.—The first part of this stitch is gathering, the second seaming. After the gathers are stroked and set into the band, the rows of gathering which have been worked at equal distances below the band are biassed as

follows :—lay upon the right side of the gathers very fine piping cord, or very coarse crochet cotton, and with a needle and very coarse flourishing thread, or silk, sew over the cord or cotton, taking hold at the same time of the gathering cotton, and pointing the needle straight towards the chest, as in seaming. The needle must be put between *every gather*. The hobbin, or coarse crochet cotton, worked

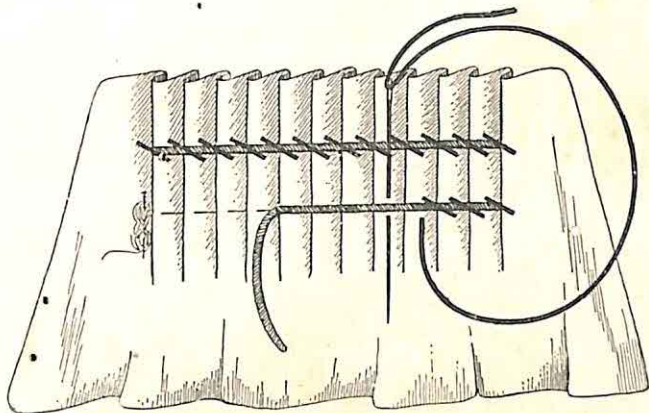


FIG. 117.

upon thus, has a very neat effect, and the gathers are made stronger. Biassing is very effective, if two or three rows of gathers, at short distances from each other, are worked over (Fig. 117).

Use of Biassing.—Biassing is used to strengthen gathers, and to ornament them, on such garments as infants' robes, and bonnets, and short frocks, children's blouses, pinafores, and frock bodies.

KNOTTING (Figs. 114 and 118)

Apparatus.—*For the Teacher.*—A band made of Java canvas, coarse needle and embroidery cotton, slate and

chalks, a baby's robe, or frock body, ornamented with coral or feather stitch, and *knott*ing at intervals between these stitches.

For the Class.—A sampler of lined canvas, or a band of calico or muslin, with a row of coral-stitches on it, needle and crochet cotton, or flourishing thread, silk or wool.

Method.—(a) Show girls how to hold the work as for feather-stitch; (b) bring the needle through from wrong to right side, leaving an end of cotton which must be securely fastened on afterwards; (c) let girls do the same; (d) mark a space on board No. 1 to show where cotton is coming out; (e) show how to draw the cotton down under the left thumb, and wind it round the tip of the thumb, so that it crosses the cotton lying under, then show how to put the needle under the loop of cotton on the thumb (with its point away from you), and back under a piece of the material, horizontally, and bring the point of the needle through where the cotton is coming from the calico, pull the long end of cotton, which lies round the needle, till the loop is surrounding the needle, and the space of material; (f) recapitulate, the class working with you; (g) illustrate on the board thus:—Count up two lines from No. 1, and mark the space No. 2, put the needle in position and draw a loop of cotton round it; (h) examine girls' work; (i) show how to draw the needle out quickly and tightly upwards, and then how to put the needle quite through the middle of the knot, and the material to the wrong side (this is to secure the knot), and bring it up to the right side in a straight line, four threads lower down.

N.B.—Recapitulate the method, till girls can work on alone, and can place the knots properly in the spaces between the coral-stitches (Fig. 114)

Notes.—1. The above is a simple method of knotting, and is used very frequently in hand-made embroidery, such as Irish and Swiss.

2. A German method of knotting, which is quite a trimming in itself, is worked as follows :—fasten on securely on the wrong side, and bring the needle through to the right side, then put the needle under a piece of the calico in a slanting direction, from right to left, bringing it out close to the fastening-on cotton ; next twist the cotton coming from the material round the point of the needle very loosely, from four to six or eight times, according to the size of knot required, and the size of the cotton, then put the cotton loosely behind the needle and draw it out carefully, till the twisted cotton rests on the material, then pull the cotton back to the right tightly, and pass the needle through the material to the wrong side, thus making a long knotted stitch (Fig. 114) ; bring the needle through to the right side, a short distance from the first stitch, and in a line with the bottom of this stitch. Three knotted stitches like this on the right-hand side, and three on the left, all slanting, form a most effective pattern. This knotted stitch may be combined with coral and feather stitch.

3. *Another Method.*—This kind of knotting is very suitable for baby-linen, and is worked on narrow hems and bands. (a) Fasten on as with the previous methods ; (b) draw the cotton down under the left thumb, and wind it round the tip of the thumb, so that it crosses the cotton lying under ; (c) lift the loop off the thumb with the point of the needle, and carry it a thread or two beyond the cotton coming from the material, and push the needle downwards, in a vertical position ; (d) draw the loop of cotton tightly round the needle ; (e) push the needle quite through, and draw it out on the wrong side, and pull the cotton tightly, so that the knot lies in a little



FIG. 118.

raised lump on the calico; (f) bring the needle up two or more threads in the front of this knot, and in a straight line.

N.B.—This kind of knotting is generally called *seeding*.

ROUND SCALLOPS (Figs. 119 and 120)

Use.—To ornament the edges of flannel garments, *e.g.* petticoats, legs of drawers, infants' barrowcoats, head flannels, woollen frocks; dressing jackets, and the edges of muslin aprons.

Method.—1. (a) Lay a shilling, or a penny, on a strip of paper, a little distance from the edge, and draw a pencil line for half a circle (Fig. 119); (b) lay the paper on the material, a little distance from the edge, and tack it in a straight line first, then run round each scallop with coarse cotton to match the colour of the material; (c) when all the edge has been marked off in this way, move the paper in on the material a quarter of an inch or more, and run an inner circle, thus making the centre of the scallops deeper than the sides, towards the pointed tops.

2. *The Stitches.*—(a) After outlining the scallops fill in the spaces between the circles by running stitches, thickly worked, in the broadest part of the scallops, and only a few run stitches in the narrowest part, towards the points, to form an underlying *pad* to the embroidery stitches; (b) if the garment is flannel, the *blanket-stitch* is worked in wool, flourishing thread, or filoselle; if muslin, ordinary white embroidery

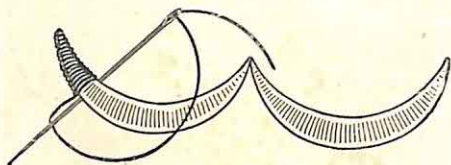


FIG. 119.

cotton is used ; (*c*) begin to work at the left side of the garment, and fasten on as for the first stitch in button-hole ; (*d*) put left thumb on the cotton or wool, coming from first stitch, then put needle in at the outlining of inner circle, and bring it out *above* the cotton, under the thumb, just below the outlining of outer circle, and draw the half knot rather tightly without puckering ; (*e*) go on in this way work-

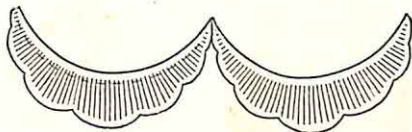


FIG. 120.

ing the stitches very near each other, and quite regularly, and then cut away the material to the shape of the outer scallop.

Notes.—The length of the stitches must suit the shape and depth of the scallops. If the scallops are pointed, the stitches must be worked closely together on the inner outline and a little apart on the outer line, so that the point shall be accurately made.

2. Scallops are often outlined on the hem of a petticoat, and the material is left uncut at the edges, thus forming only a pattern. The garment is prettier, if the material is cut away in the form of the scallops.

3. Patterns, *e.g.* flowers, leaves, dots, eyelet-holes, are frequently worked above the scallops on flannel petticoats, frocks, head flannels, and barrowcoats, in raised satin stitch. The pattern must be traced on the material, and then the spaces filled in with running stitches, as in scalloping. The satin stitch is worked from right to left, and is a long straight stitch, worked closely together over the underlying stitches, which raise the otherwise flat stitches. The outlines of leaves and dots can still further be ornamented by stitching and knotting.

SINGLE HEM STITCH (Fig. 121)

Method.—(a) Fix a hem the depth required, and tack it quite neatly and evenly; (b) draw out two, three, four, or more threads, according to the coarseness of the material, below the edge of the hem; (c) fasten on at the left-hand side as for hemming, and tuck the end under the hem; (d) put the needle under two or more cross threads quite straight as if stitching; (e) draw the needle out and up-

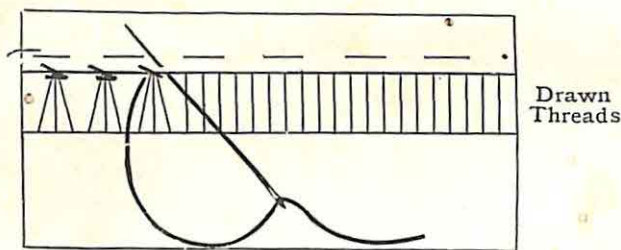


FIG. 121.

wards, and then put it into the edge of the hem, directly above the last thread of the cluster.

Another Method.—(a) After fixing and tacking the hem and withdrawing the threads, fasten on at the left-hand side, and work from left to right; (b) put the needle under two or more threads, quite straight, and draw it out; (c) put the needle under the edge of the hem a thread further on, and draw it out.

Use.—Single hem stitch is used for pocket-handkerchiefs, for children's muslin and linen pinafores and frocks, for household and table linen, *e.g.* towels, d'oyleys, table-cloths and napkins, antimacassars.

Apparatus.—For the first lesson the teacher and class should use Jaffa cloth, and D.M.C. coloured embroidery, or fine knitting cotton. For muslin garments good ordinary sewing cotton is suitable; for linen articles, flax or flourishing thread.

EYELET-HOLES (Figs. 122 and 123)

Method.—1. *Making the Hole.*—(a) Pierce the material with a steel or bone stiletto, on the right side of the article, till the hole is large enough for the hook, or tape

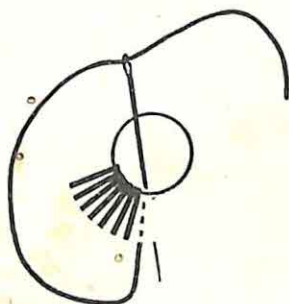


FIG. 122.

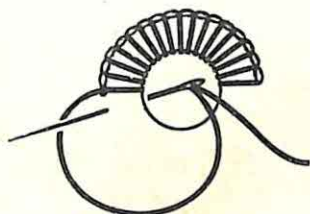


FIG. 123.

string or lace; (b) outline the holes on the right side by running stitches; (c) cut away a little of the material, which has been pushed to the wrong side.

2. *The Stitches.*—Overcast the eyelet-holes from left to right, working the stitches very close together, and drawing them tightly, in order to protect and cover the raw edges, and make them firm and strong.

N.B.—Fasten on and off very neatly and securely, on the wrong side, by a few back-stitches.

Notes.—1. Eyelet-holes are sometimes partly worked in over-cast-stitch (seaming), and partly in blanket-stitch. This is especially the method for embroidery patterns. The lower part of the holes is worked in blanket-stitch (Fig. 123).

2. The materials used for working eyelet-holes are strong linen thread, cotton, twist, flourishing thread, and white and coloured embroidery cotton (D.M.C.).

3. Dressmakers, bootmakers, embroiderers, must know how to work eyelet-holes perfectly.

Use.—Eyelet-holes are used instead of eyes, when dress bodices are fastened by hooks or laces, for laced boots and children's stay-bands, for neck hems of pinafores, frocks, shifts, which are drawn up by tape strings.

CHAPTER XIX

SWISS DARN—GRAFTING—STOCKING-WEB STITCH

SWISS DARNING (Fig. 124)

Class.—Older Scholars, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Paragon Frame, slate and chalks, a piece of stocking-web, needle and coloured D.M.C. embroidery cotton.

For the Class.—A square of stocking-web, needle and coloured embroidery cotton of suitable size to cover the strands perfectly.

Method.—1. (a) Write the title of lesson on the board, and draw an illustration of the right and wrong sides of the stocking-web; (b) while drawing on the board, explain the use of Swiss darning:—(1) to cover and strengthen a thin place in stockings, socks and jerseys, on the right side

of the material, by a stitch like the original texture of the web, and (2) that it is a foreign method of darning; (c) contrast this darn with the one worked for a thin place, and elicit that that darn was worked on the wrong side, by a straight perpendicular stitch.

2. *Position of Stitch.*—Show how to hold the work in a slightly slanting position over the left fore-finger.

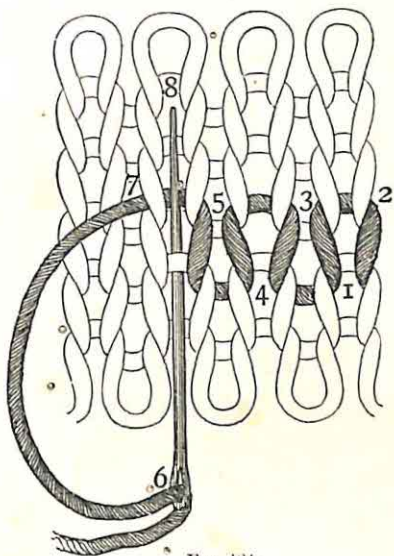


FIG. 124.

3. *Fastening on.*—(a) Turn the wrong side of the knitting frame towards the class, and show how to weave the needle under and over the loops, away from the supposed thin loops, and on the strong ones, at the left-hand bottom corner, and push the needle through a loop, and draw it out on the right side, leaving a short end of

cotton on the wrong side; (b) tell the girls to fasten on in this way, and examine their work; (c) turn the right side of knitting towards the class, the girls turning their work at the same time, and holding needle and cotton in readiness to begin darning; (d) point out that the fastening on is now really at the right-hand side, and that they always work Swiss darning from right to left, and on the right side of the material.

4. *The Darning Stitch.*—(a) Examine to see if every girl

has brought her needle through the middle of a *loop* or leaf, and mark the illustration on board at this spot No. 1, then point out by the illustration that the cotton is coming out in the row below the one, which is to be covered by the darning material (Fig. 124); (*b*) tell girls to bring the needle through a loop, and examine; (*c*) show by the knitting frame how to put the needle under the middle of a whole loop, in the row *above* the one which is being strengthened; (*d*) turn the frame to, show that the needle is showing quite through, without splitting the stocking material; (*e*) tell the girls to put their needles under a whole loop, in the way you have done, and examine their work; (*f*) draw your needle and cotton through carefully, letting the darning cotton lie loosely on the web, and point out that only one half of the loop is covered by a stitch, slanting from left to right, and that the cotton is coming out half a loop further to the left, but in the row above; (*g*) mark the place where the needle was put under the loop No. 2, and where the cotton is coming out No. 3, and thicken in coloured chalk the half loop which has been covered by the darning stitch; (*h*) tell girls to draw their needles out, and let the cotton lie rather loosely over the web; (*i*) examine their work; (*j*) show by the knitting frame how to put the needle back into the loop, where the fastening on cotton was first brought out, *i.e.* No. 1 in illustration, and put the needle under this half loop and half of the next loop to the left of it, in a straight direction; (*k*) mark the place where the cotton will come out No. 4 in the illustration (Fig. 124); (*l*) tell girls to do this, and then examine their work; (*m*) draw needle and cotton out, the girls working with you:—they will see that one whole loop has now been covered, and that there are two horizontal stitches on the wrong side, one

in the row below, and one in the row above the row that is being darned; (n) illustrate these straight stitches on the left-hand side of the wrong side illustration.

N.B.—Go on in this way, till the row of loops or leaves is completely covered, cautioning the girls not to draw the cotton too tightly, nor to split the threads of the web on the wrong side. It is quite allowable to lift the darning cotton, so that it may lie quite over the loops of the original. Swiss darning when carefully and skilfully done, with cotton, or wool, or silk, of the same colour as the original, cannot be detected, except by the stitches on the wrong side.

5. *Darning the Second Row.*—(a) Show class that the last loop in the first row must be half covered, then show how to put the needle in the middle of this loop, with its point upwards, and bring it out in the middle of the same loop; (b) put the needle in position on the slate illustration (Fig. 124); (c) turn work round, and draw the needle out; (d) recapitulate, the girls working with you.

(*N.B.*—A row of darning is now at the top of the work, and the cotton is coming out of the middle of the last loop covered.)

(e) Show how to put the needle in a straight direction under the whole loop, below the one to be covered, and draw it out as before; (f) show by the knitting frame that a horizontal stitch has been made between the ridges in the row below, on the wrong side; (g) tell the class to do this, and examine their work; (h) show how to put the needle well down into the middle of the last loop in the first row, and bring it out in the middle of the loop to the left of it; the class will then see that the whole loop has been covered; (i) illustrate step by step on the slate; (j) tell girls to finish the first loop of the second row, and examine their work.

N.B.—Proceed in this way, recapitulating on the frame, illustrating on the slate, and examining girls' work, till the second

row is covered, except the last loop, when the girls must be taught how to turn their work for the third row of darning.

6. *Third Row of Darning.* — (a) Point out by the knitting frame that the last loop in the second row is only half covered, and then show how to put the needle well down in the middle of the first loop that was covered, and bring it out in the middle of the last loop in the second row; (b) illustrate the position of the needle, in a vertical direction with its point towards the worker; (c) tell the class to do the same, and then turn their work round, and draw the needle out; (d) examine their work; (e) let them put their work down and answer questions on the use of the stitch, the reason for its name (the German, or French Swiss are supposed to have invented this stitch for darning thin places in coarse knitting), the way to fasten on, how to begin the stitch, and how to complete it, how to place the needle, in order to darn the second and third rows.

- N.B.—1. Explain that fastening off is the same as for fastening on, and both must be at the sides of the darn, that Swiss darning must be soft and flat and pliable on right and wrong sides, that in darning a garment, the darning material must match in colour, and must not be too coarse nor too fine.
2. The class ought to be able to darn the third row unaided, and should know that the third row is like the first, and the fourth like the second, in regard to the position of the needle, in turning the work round.
 3. The shape of the first darn should be a square or an oblong; but when the girls are thoroughly acquainted with the method, they should be shown how to darn a circle, or an octagon. The knees of boys' knickerbocker stockings are best darned in the shape of a circle, or octagon. The top of a reel could be laid on the web, and a pencil or chalk mark drawn round it, for a guide. The difficulty in round darns is at the sides, where the loops can only be half covered, as a rule.

GRAFTING STOCKING-WEB MATERIAL

Class and Apparatus.—The same as for Swiss darning.

Method.—1. (a) Show by the knitting frame that a few loops of the web may be broken in a straight line, and that the material on all sides of the fractured loops may be strong and sound; (b) explain that there is a way of drawing the sides of this kind of hole together by a stitch in new cotton, wool, or silk, exactly like the web, and that the process is called grafting; (c) compare the process of grafting a tree or plant with a new branch or cutting from another tree or plant; (d) turn the wrong side of knitting frame towards the class, and show how to cut the material between two horizontal ridges; (e) tell the class to do the same, and examine their work; (f) show how to free the loops of the broken ends, the class working with you; (g) examine the girls' work to see if they have unravelled out only one row of broken loops, and that the two unravellings are both on the wrong side, one at each end of the slit, and that these ends have been put under and over the horizontal ridges of the web, with a crochet hook; (h) give the girls some pieces of cardboard or stiff paper, and show them how to tack the web to this foundation, with the right side uppermost.

2. *The Stitch.*—(a) Bring the needle through the middle of a loop in the bottom row, at the right-hand corner, and on the unbroken web, and leave a long end of cotton; (b) recapitulate Swiss darning over two or three of the loops that belong to the missing row, and examine girls' work; (c) illustrate on the slate (Fig. 125); (d) point out that the loops dovetail into the spaces opposite them (see lesson on common darn), and that the perfection of grafting consists in fitting the loops into their proper

spaces, either above or below ; (e) show by knitting frame how to put the needle in straight into the middle of a loop at the top, and bring it out in the middle of the next loop, further to the left and at the top ; (f) tell girls to do the same, and examine their work, before the needle is drawn out ; (g) draw your needle out, and show that one half loop, which connects two top loops to one bottom loop, has been formed ; (h) illustrate on the slate (Fig.

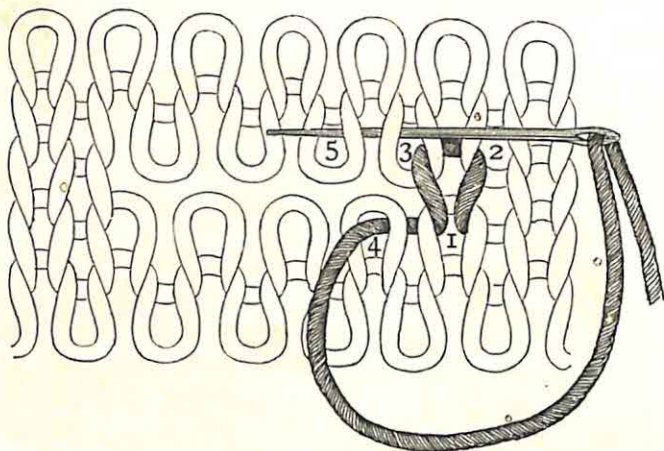


FIG. 125.

125), and tell girls to draw their needles out, so as to bring the loops together without puckering ; (i) show by knitting frame how to put the needle back into the bottom loop with the half stitch in it, and bring it out in the middle of the next loop, further to the left and at the bottom, so that there are again two half loops on the needle, which lies in a horizontal position ; (j) tell the class to do the same, examine their work, and caution them in regard to not splitting the loops ; (k) illustrate on

the slate the needle in position; (*l*) go on demonstrating and examining, till the loops are all joined together, then recapitulate Swiss darning the corresponding number of unbroken loops at the left-hand end of the slit; (*m*) tell girls to take the web off the card, before they darn the last loop, then to pass the needle through this loop to the wrong side, and weave it under and over the loops to fasten off; (*n*) tell them to thread the needle with the long end of cotton at the fastening on, and weave it in and out in the same way, and cut off ends of cotton.

N.B.—1. Grafting should not be too loosely nor too tightly worked.

It ought to lie quite flat and smooth, and when worked with the same coloured darning material is not easily detected.

2. Grafting is employed in putting new parts to a knitted garment, *e.g.* a heel, foot, or a patch in the leg of a sock, or stocking, or jersey. It can be employed in putting new feet to old worn, woven stockings.
3. Ladies are employed in stocking factories to examine the stockings as they come from the loom, and to *graft* any broken loops accidentally made in the process of weaving.

DARNING A HOLE IN STOCKING-WEB STITCH

Apparatus.—*For the Teacher.*—The knitting frame, slate and chalks, a piece of coarse stocking-web, darning needle and coloured embroidery cotton, sewing needle and cotton, and scissors, and crochet hook.

For the Class.—A square of stocking-web material, darning needle and cotton, sewing needle and cotton, scissors, and crochet hook.

Method.—1. *Preparing the Hole.*—(*a*) Show by the knitting frame how to cut a loop between two horizontal ridges, on the wrong side, and then with a pin unravel

the loops on either side till the slit is an inch or more or less wide; (b) tell the class to do the same; (c) show by the frame, the class afterwards working with you, how to ravel out the rows, till the hole is an inch or more in length; (d) elicit that if the knitting had been worn into a hole like this, and the ordinary common darn was the method of darning it, the ravellings or ladders would be first taken up, by a crochet hook or head of a pin, and the web darned on the wrong side; (e) explain that the ravellings must be cut in the centre, and woven in with a crochet hook from the vertical sides of the hole on the wrong side, and in a slanting direction (or (f) show class how to thread a large-eyed sewing needle with a ravelling, and weave it over and under the loops of the web in a diagonal direction); (g) tell the class to work with you, until all the ravellings are fastened down, and the vertical edges of the hole are secured by this means; (h) examine the work of the class.

(N.B.—The horizontal loops at the top and bottom of the hole must be quite free of broken bits of the texture.)

(i) Tell class to fasten the web to a piece of cardboard, with the right side uppermost, and perfectly straight as for grafting; (j) examine the work of the class; and (k) draw an illustration of the hole in the web, with the horizontal loops quite free.

2. *Stranding the Hole vertically with Sewing Cotton.*—(a) Show the class how to fill in the hole with strands of sewing cotton, contrasting in colour with the web, and explain that these strands must be cut away and drawn out, when the stocking-web stitch is finished; (b) allude to the stranding a hole for the common darn with sewing cotton, and explain that for stocking-web stitch this stranding is different, being in fact a very elongated Swiss

tightly; (f) tell the class to strand a loop in this way, and examine their work.

(N.B.—Impress upon the class that the strands of sewing cotton must be perfectly vertical, and that the loops must be kept in straight lines, or the darning will be unlike the original web.)

(g) Illustrate the strand of cotton by a finely-drawn coloured chalk line (Fig. 126); (h) show class how to bring the needle to the bottom row, and put it back to the right into the loop, with the first half stitch coming from it, and then forward in a horizontal direction through the next loop to the left, and pull the needle out, in such a way as to draw the top and bottom loops together, and to fill in the hole, without puckering the web, or leaving the strand too loose; (i) tell the girls to strand the bottom loops, and then examine their work, and caution them about the tendency to split and twist the original loops, while stranding; (j) work with the class for a few more loops, top and bottom, and illustrate on the slate, then tell the girls to finish the stranding, and to fasten off the sewing cotton, on the left-hand side at the top, by passing the needle through the web, and the cardboard.

N.B.—If any of the class have not stranded the hole in upright lines, corresponding to the vertical rows of the web, tell them to cut the sewing cotton and re-strand the hole. It is useless to darn on crooked lines of the sewing cotton. Some prefer teaching the stranding and the stitch on a piece of cardboard, perforated at the top and bottom with holes $\frac{1}{8}$ or $\frac{1}{4}$ of an inch apart, an even number of holes being pricked at the bottom and an uneven number at the top; for instance, six at the bottom and seven at the top, and so on.

3. *The Stocking-Web Stitch*.—(a) Explain that this is a foreign method of darning a hole, by a stitch exactly like the pattern of the web, and is in fact *Swiss darn* and *grafting* stitch, worked on the strands of cotton instead of

on a foundation of loops ; (*b*) show the class how to begin at the right-hand bottom corner, by passing the darning needle through the card, and the first loop, two rows below the loops that are stranded, leaving a long end of the darning cotton or wool, which must be woven in, when the web is removed from the card ; (*c*) illustrate on the diagram, marking the place No. 1 (Fig. 126) ; (*d*) tell the class to fasten on, and examine their work ; (*e*) recapitulate Swiss darning, and how to turn the row, and work backwards ; (*f*) then point out that the row of loops with the stranding cotton coming from them must be worked over, and the new stitches must be made exactly the same in size as the original loops of the web or knitting ; show class how to put the needle under a loop and two strands of the cotton coming out of it, in a straight direction from right to left, and draw the needle out ; then put the needle back into the same loop below the loop with the strands of cotton in it, and forward into the middle of the next, being careful to separate the sewing cotton in doing this ; (*g*) illustrate by coloured chalk the whole loop covered ; (*h*) tell the girls to cover a loop in the same way, and examine their work ; (*i*) show again how to put the needle under the head of the loop, out of which the darning cotton is coming, and the two strands of cotton that meet in the middle of it, and draw the needle towards you carefully, so as not to flatten the loop, nor to leave the darning cotton too loose ; (*j*) illustrate this half stitch ; (*k*) tell the class to cover a loop by a half stitch in this way, and examine their work ; (*l*) show again how to put the needle back into the middle of the same loop, which is in the row below the stranded loop, and forward into the middle of the loop further to the left, being careful to separate the strands of sewing cotton, in order

to prevent splitting the sewing cotton, or tangling the darning material; (*m*) illustrate the whole stitch covered; (*n*) tell the class to finish covering this loop, and then work on with them, till this row is darned, and they have put the needle in the proper position for turning the work to darn backwards again; examine their work.

4. *Second Row of Darning on the Strands.*—(*a*) Show the class how to put the needle under the middle of a loop, and one strand of sewing cotton, which is in the third row below the first stranded loops, and draw it out; (*b*) tell the class to do the same, and examine to see if the needle is in the proper position; (*c*) show how to put the needle back into the loop with one strand of sewing cotton coming from it, and forward into the loop, with two strands in it, being careful to put the needle far down into the loops; pull the needle out, and draw the attention of the class to the fact that only one loop is covered, and that now they begin to make the stitches on the strands of cotton only; (*d*) when the class has covered this loop, show how to put the needle under the two strands of sewing cotton, from right to left; draw it out and downwards, again being careful to keep the half stitch the same size as a half loop of the web; (*e*) illustrate this half loop on the slate; (*f*) show how to put the needle back into the loop and forward into the next loop, and draw it out, so as not to twist the darning cotton, and to make the complete stitch the same size as the loop of the web; (*g*) illustrate; (*h*) tell the class to do the same, and examine their work.

N.B.—Go on in this way, till the first row of loops is made on the strands of sewing cotton; then show how to turn the work, and darn back, always putting the needle under two strands of the sewing cotton first, then back into the middle of the new loop made by the darning cotton, and forward to the left

into the middle of the next loop, then under two strands of sewing cotton again. When the strands have been completely covered by new loops, and the horizontal rows of darning agree in number with the rows of the web, the top row, with the strands of sewing cotton coming from it, must be grafted in the same way as the bottom row, and the two rows of the web above must be Swiss darned. Constant supervision is needed in teaching this darn to a class, in order that, when finished, the filled-in hole shall look like the original web, and shall not be clumsy at the sides. The darning cotton and wool, for mending an actual hole in a knitted garment, should be of the same colour and size, so that the hole shall be successfully filled in.

Another Method.—If the hole is met with in a coarse knitted garment, many prefer knitting a piece the size of the hole, and grafting the new piece to the old by the horizontal row of loops at the bottom and top; then turning to the wrong side, and with the ravellings of the old knitting uniting the vertical edges of the hole by darning the ravellings in a slanting direction across the new patch; and turning to the right side, Swiss darning the material on four horizontal loops, two loops on the garment and two loops on the patch, the whole length of the patch, so that the sides are completely strengthened.

N.B.—This darn is exceedingly useful, and can be quickly accomplished, if the new piece is knitted and grafted as given in the second method. The darning with a needle takes a much longer time to do.

CHAPTER XX

FINE-DRAWING A HOLE IN CLOTH—DIAGONAL PATCH— SEWING ON CORDS—TWILL AND WAVE DARNS

FINE-DRAWING A HOLE IN CLOTH

Method.—(a) Trim the edges of the cut or tear with a sharp-edged knife; (b) draw the edges closely together,

and overcast them with sewing cotton ; (c) fasten on the wrong side the left end of hole, using a fine needle, and sewing silk the same colour as the cloth, or a human hair ; (d) turn the right side towards you, and bring the needle up through the cloth at the right-hand end of the cut, then slip it from the side of the rent towards you to the other side, being careful to put it below the surface edges, and the thick woolly nap of the material in a slanting direction ; (e) put the needle through the edge of the cloth which is away from you, and the edge which is nearest to you, in a slanting direction, and at the same place, where it was last brought out ; (f) go on in this way, being careful not to draw the stitches too tightly, and to make them quite invisible at the surface of the cloth ; (g) when the rent is completely drawn together, fasten off on the wrong side neatly and securely, by a few back-stitches ; (h) lay the darn on an ironing board, place a damp cloth over it on the wrong side, and pass a hot iron over it in such a way as to raise the *nap* or *pile* of the cloth, instead of flattening it.

Use.—Fine-drawing is quite an art, and is the process of making darns in cloth quite invisible.

Note.—Fine-drawing requires much skill and care in the working, and is a darn not very generally known, though it is so useful in homes.

DIAGONAL FLANNEL PATCH

Method.—*Fixing.*—(a) Find the selvedge of the garment, the right side, and the way of the nap, and put in a pin or tacking thread to mark these three things ; (b) take a square of flannel, which must be the correct size for well covering the hole, and find the selvedge, right side, and

way of the nap, and mark with a pin; then fold it from corner to corner, and cut it diagonally; (c) place the

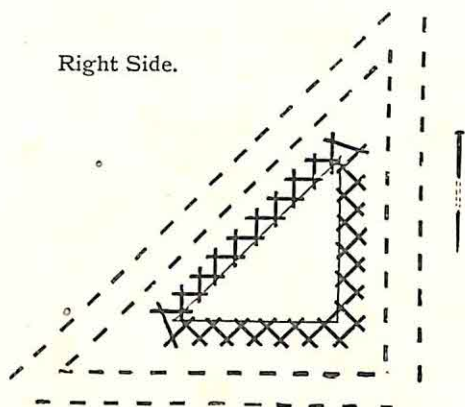


FIG. 127.

wrong side of the garment uppermost, and put the right

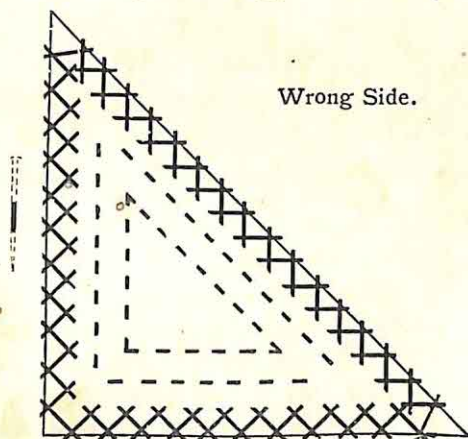


FIG. 128.

side of the three-cornered patch, selvedge to selvedge, and the nap going down, over the hole, and put in a pin, then

tack the patch to the garment five threads from the edge, being careful to begin on the selvedge side, and then tack the woof, and lastly the crosswise edge, which must not be stretched; (*d*) herring-bone the patch to the garment, beginning on the selvedge side first, and carrying out the rule with regard to the corners (or fix the right side first, and herring-bone it before herring-boning the wrong side). See lesson on Flannel Patching.

N.B.—The corners are the difficulty in the diagonal flannel patch, and for this reason it should not be taught, till the girls have had some practice in flannel patching (Figs. 127 and 128).

Use.—A diagonal flannel patch is needed to mend a garment under the arm, where a gusset shape is most suitable. If a sleeve is being mended, the sides of it should be loosened from the garment, and then only the crosswise side of the patch and the garment would need to be herring-boned, the selvedge and woof sides of the patch being re-fastened to the seams in the garment.

N.B.—A circular patch is sometimes useful in mending a flannel petticoat, below the centre of the band in the front breadth.

SEWING ON SILK AND WOOLLEN CORDS

Method.—(*a*) Secure the ends of the cord by sewing the strands of it thickly and tightly together; (*b*) place the cord at the outer edges of the article to be trimmed, holding it in the left hand, neither too tightly nor too loosely, and fixing it to the article, while the sewing is in progress; (*c*) fasten on at the right-hand side by seaming stitches over the end of the cord and through the edge of the garment, or article that is being trimmed; (*d*) then put the needle through the under part of the cord only, and the material that lies beneath it in a slanting direction

to form a long stitch ; (e) put the needle through the under part of the cord and the material beneath it, in the same way as in the first stitch, alternately putting the needle towards you and away from you, and always through the under part of the cord, drawing the needle and cotton through rather tightly, without puckering or exposing the stitches ; (f) fasten off the last end of the cord by sewing the different strands in it tightly and firmly together, and then unite the first and last ends by closely sewing them backwards and forwards through the thickness of the cord.

Use.—Cording is used for trimming dress bodices at the necks, wrists of sleeves, and basque ; for household furniture, *e.g.* chairs, sofas, cushions, mantel-boards, and window-hangings, to ornament and protect the edges.

N.B.—When cording is skilfully and neatly done, the stitches and joins are almost invisible.

TWILL AND WAVE DARNS

Method.—*Twill.*—Put the needle under and over the threads, as in ordinary darning, and keep to the same number that was taken up in the first row, but always coming down one lower, in every row.

N.B.—This darn is very useful for twilled materials, *e.g.* flannel, serge, and other dress materials, and twilled calicoes and linen.

The Wave.—This darn resembles the twill. Put the needle under and over the threads or loops of the material, and come down one in every row, till say five, or seven rows are darned, then go up one in every row, till seven rows are darned, and then in the next seven rows come down one loop or thread.

N.B.—This darn is used for stockings, socks, and other knitted garments, and for table linen.

CHAPTER XXI

PUPIL TEACHERS' SAMPLERS OF STITCHES

A. FLANNEL

Materials.—(a) $\frac{1}{4}$ -yard of Saxony flannel, or, if preferred for coarse work, Welsh flannel; (b) coloured sewing cotton and flourishing thread; (c) flannel binding and tape, both narrow and of medium width; (d) calico for bands; (e) buttons.

Use.—To show in miniature (a) the stitches; (b) the mending; (c) the fixing and making up of any ordinary flannel garment.

Method.—(a) Tear off a strip of flannel 9 inches long and 6 inches wide, and find the right side and the way of the nap, and put in a pin; (b) fix a hem 1 inch deep on one selvedge side, and herring-bone it on the wrong side, and stitch it a few threads from the edge; (c) on this hem work two buttonholes, one going with the selvedge and one across, and one with one corner round, and the other braced, and the other with both ends braced.

(N.B.—Flannel bands are sometimes used for children's drawers, and buttonholes on these bands are needed both ways of the stuff.)

(d) On this strip set in a square patch, and a three-cornered one (see Flannel Patching); (e) sew on two buttons to correspond with the size of the holes, one of linen, the other of bone or pearl; (f) sew two tape strings on the hem, one on the wrong side and one on the right, a little distance from the edge, as for a barrowcoat; (g) take

another strip of flannel 9 inches long and 3 inches wide, and match the right side and the way of the nap with the first strip, and join them together by a petticoat seam (see Flannel Joins); (*h*) add to this strip another of the same length and width, and join them by flannel bodice seam, leaving a third of the length unjoined; (*i*) fix hems on this opening and strengthen the bottom of the slit by a strengthening tape (see Lesson on this); (*j*) darn as for a thin place a space on each of these breadths, one a diamond shape, the other the twill or wave darn; (*k*) take another piece of flannel 9 inches long and 6 inches wide, and join it to the third breadth by the third method of seam in flannel (see Lesson on Flannel Seams); (*l*) fix a hem 1 inch deep on this breadth lengthwise and herring-bone it, and then fix and run a tuck $\frac{3}{4}$ of an inch deep above the hem; (*m*) feather-stitch the tuck above the stitches on the right side; (*n*) scallop the edge of the hem (see Lesson on Scalloping) and embroider it, and work dots and leaves in satin-stitch above the scalloped border; this is to represent the side of a dressing jacket, etc.; (*o*) bind the bottom woof edge of the flannel with flannel binding (see Lesson on this); (*p*) pleat the left-hand top edge (*i.e.* the edge of one side of the slit) into a calico band about 4 inches long and 1 inch deep; fell the band to the flannel, and stitch the edge of it on the right side; scallop the top right hand, and work a simple design in satin-stitch; (*q*) pleat the flannel about 1 or $1\frac{1}{2}$ inches from the scalloped edge; (*r*) lay over the pleats a narrow flannel band, and fell it on either side to the pleats; (*s*) feather-stitch it across the centre.

N.B.—This is to represent the leg of flannel drawers, trimmed with flannel embroidery.

B. CALICO

Materials.—(a) White calico, neither too fine nor too coarse; (b) coloured sewing cottons; (c) tape, buttons, and Mull muslin.

Use.—To show (a) the stitches; (b) the fixing; and (c) the repairing of a calico garment.

Method.—(a) Take a piece of calico, 9 inches long and 6 inches wide, and on it fix a hem across the woof 1 inch deep, and neatly hem; (b) fix above this hem two or more tucks $\frac{1}{4}$ of an inch deep (see Lesson on Tucks); (c) set in a calico patch, not less than 2 inches square, above the tucks; (d) mark your initials in the centre of the patch; (e) sew on two tape strings to the hem, one on the right side and one on the wrong; (f) place a single band 6 inches long selvedge way, and $1\frac{1}{2}$ inches deep on the plain calico above the patch, and fell it neatly to the patched breadth; (g) line it on the wrong side with another single strip of calico, so as to form double material, and fell it over the stitches from the right side; (h) stitch the band $\frac{1}{4}$ of an inch above the felled edge; (i) take two pieces of calico 3 inches deep, selvedge way, and $6\frac{1}{2}$ inches wide, and join $1\frac{1}{2}$ inches by counter-hem, hem the sides of the opening, and set on a strengthening tape, as far as the hems of the opening, and gather it across the woof both top and bottom; (j) set one gathered edge into the band, which is attached to the patched breadth, both on the right and wrong sides; (k) feather-stitch and knot the band $\frac{1}{4}$ of an inch above this edge; (l) set the other gathered edge into another single band of the same length and depth as the first one; (m) take two pieces of calico 3 inches deep and $6\frac{1}{4}$ inches wide, and join them in the centre by run-and-fell seam, and pleat it

- across the woof both top and bottom; (*n*) and fell the other edge of the single band on the pleats; (*o*) line the band on the wrong side, so as to make it double, being careful to set the gathers in without puckering, and to fell the band over the pleats without showing the stitches on the right side; (*p*) sew on a linen button at one end of the band, and work a buttonhole with one end round and the other braced, at the opposite end; (*q*) work a row of coral-stitch on this band above the gathers, and a row of feather-stitch and twisted knotting across the band, above the pleats; (*r*) place another band, split into two halves, over the pleated edge, and neatly fell on the right and wrong sides; (*s*) work on this band a buttonhole with both ends braced; and sew on a small linen button by starring it, and a small pearl shirt button, and at the edge of the band make a strong loop of cotton (large enough to go over the pearl button), and thickly bind the edge of this loop with the ordinary buttonhole stitch, being careful not to tangle the cotton, and to fasten on and off both strongly and neatly; (*t*) take two pieces of calico, $6\frac{1}{4}$ inches wide, and 4 inches deep, and join them by sew-and-fell seam for $11\frac{1}{2}$ inches; (*u*) set in a gusset at the top of this seam (see lesson on the gusset) and hem the openings, and set the joined pieces into the band quite plain, and fell the band on the right and wrong sides; (*v*) on this band work another row of stitching, a row of chain-stitch, and a row of fancy herring-bone stitch; (*w*) fix a hem $\frac{1}{2}$ inch deep, and hem it neatly, and then fix and run a set of very narrow tucks above it; (*x*) take a piece of Mull muslin 12 inches long and 1 inch deep with the selvedge, whip it, and set it on the edge of this hem; (*y*) bind one raw edge of the selvedges with narrow tape; (*z*) turn down on the wrong side one fold of the opposite selvedge

edge, and lay against it a piece of everlasting edging or a piece of embroidery, and hem the trimming to the calico, and stitch the calico at the edge to the trimming. At the thick edges of the bands, fell as well as stitch; (a1) mark the date on the plain space of calico above the patch, and darn a cross cut, and hedge tear, on either side of the opening, which has the strengthening tape; work two eyelet-holes on one of the bands before it is lined on the wrong side, and put in draw strings (see lesson on this).

N.B.—There are other ways of fixing and managing the material; the above is only given as a guide.

CHAPTER XXII

SMOCKING, QUILTING, AND GAGING

SMOCKING

THE art of Smocking, like Netting, is of ancient origin, and was certainly known in England in the thirteenth century. The art has been lately revived, and is now used for underclothing, as well as for artistic dresses. Smocking is the art of decorating garments by needlework stitches arranged in quaint and elaborate designs. It is especially suitable for children's frocks, pinafores, cloaks, hats, bonnets, for ladies' tea-gowns, dressing-gowns, and jackets, and for blouses and vests of dress bodices. The word *Smock* was formerly the name given to women's and girls' shifts, and to a loose coarse linen shirt, worn outside all the other garments, by farm labourers and

waggoners. This shirt is known to us as a *Smock-frock*. Smock-frocks were formerly most elaborately ornamented on the body and sleeves, and in some country districts, where they exist, they are highly prized and valued, as relics of the past.

Method.—1. *Marking the Material.*—(a) Place the wrong side of the material uppermost; (b) let the selvedge run up and down towards you; (c) take a cardboard inch measure, and place it along the width of the material, as far below the top edge as you think will be necessary, and mark off half-inch spaces on the material.

(N.B.—If the material has a white or light ground, use an ordinary lead pencil, if black or coloured ground, use a contrasting coloured pencil.)

(d) Measure along the length quite close to the selvedges $\frac{3}{8}$ or $\frac{1}{4}$ inch spaces; (e) let all the marks across the material lie regularly below each other; (f) then draw lines through the dots of half-inch spaces from top to bottom, and lines across the material from the $\frac{3}{8}$ or $\frac{1}{4}$ inch spaces, or crease the material from side to side.

N.B.—1. The $\frac{1}{2}$ inch spaces denote the width of the gathering stitches; the $\frac{3}{8}$ or $\frac{1}{4}$ inch spaces, the distance between each row of gathering.

2. Different patterns must be spaced differently; for instance, the spaces may be $\frac{1}{2}$ an inch apart both ways of the material for a wide diamond pattern, or the spaces may be $\frac{3}{8}$ or $\frac{1}{4}$ of an inch apart, forming smaller squares in the drawing, and smaller diamonds, when smocked. Care must be taken in marking off the material, to draw the exact number of rows, and oblongs or squares, to finish the patterns correctly.

2. *The Gathering Stitch.*—(a) The first stitch employed is gathering, which is not worked according to the rule of

the ordinary stitch in plain sewing, because the gathering-stitch for smocking must be equal in length on both sides of the material, in order that the folds of the stuff may be exact in width, when the gathering thread is drawn up, and it is worked on the wrong side; (b) begin on the right-hand side of the work, and fasten on by means of a *knot* in the cotton, a thread or two to the right of the first mark on the top line; (c) put the needle in at the first crossing lines and under $\frac{1}{4}$ of an inch of the material, *i.e.* half of the space, then pass over the next $\frac{1}{4}$ of an inch, and bring the needle out at the next mark, where the lines intersect each other, and so on, till the first row is finished; (d) take needle off the cotton and re-thread it, and begin the second row in exactly the same way as the first, keeping all the stitches as even and regular as possible; (e) when all the rows are gathered, draw them up tightly, and wind the cotton round pins, as in ordinary gathering.

N.B.—When the smocking is finished, the gathering threads must be drawn out, and for this reason, each row of gathering must be fastened on by a knot.

3. *The Honeycomb Pattern.*—(a) Turn the work with the right side towards you; (b) if the material is cambric, muslin, or zephyr, use flourishing thread to match the colour of the material, if silk or satin, use silk, and make a knot in the thread or silk; (c) begin at the left-hand side by bringing the needle through the first fold directly above the gathering cotton; (d) draw the next pleat close to the first by a back-stitch from right to left through each pleat; (e) work another back-stitch through the first and second folds, then put the needle in the second fold, and pass it downwards between the material, and bring it out of the same fold above the second gathering cotton; (f) draw the

third fold to the second by a back-stitch through each, then a back-stitch through both, and pass the needle upwards between the material and bring it out of the third fold above the first gathering cotton; (g) draw the fourth fold to the third by a back-stitch through each, and then a back-stitch through both, and pass the needle downwards between the material, and bring it out of the fourth fold above the second gathering cotton. Go on in this way, till the first and second rows are finished, taking two folds together every time, the last fold of the preceding stitch being the first fold of the succeeding stitch; the third and fourth rows of gathering are treated in the same way.

N.B.—In the first lesson on smocking, beginners would find Java canvas the best material to practise upon, because the threads can be counted for the spacings, and the material being soft can be easily drawn up.

4. *Feather-stitch Pattern.*—(a) After spacing and drawing lines, or creasing the material, and gathering as described above, turn the work with the right side towards you, but with the folds running from the right hand to the left, *i.e.* with the selvages lying across instead of up and down; (b) fasten on, at the second fold, by a knot in the flourishing thread or silk, and bring the needle up to the right side, a little bit above the gathering cotton; (c) put the needle through the first and second pleats, holding the thread or silk under the left thumb, and draw the needle out above it; (d) then put the needle into the second and third folds, a little below the gathering cotton, and throw the thread or silk to the left, and place the left thumb on it, then bring the needle out above the loop of the thread or silk; (e) proceed in this way, till the row is finished, and begin in the same way on the second row of gathering cotton.

N.B.—Remove the gathering cotton, when the feather-stitching is finished.

5. *Overcasting Stitch*.—(a) When the work is quite ready, begin on the right side of the material, at the left-hand side, and on the first row of gathers; (b) bring the needle up through the first fold, and then put it into the same fold in a slanting direction, from right to left over the gathering cotton, and draw it out; (c) put the needle into the second fold in a slanting direction over the gathering cotton, and bring it out a little below the place where it was first put in the fold. Go on like this in every row of gathering, taking up each fold separately. This stitch is like the seaming stitch used in overcasting.

6. *Herring-bone Pattern*.—(a) This pattern can be used in combination with other patterns; (b) bring the needle up through the first fold, above the first row of gathers; (c) take the needle down to the second row of gathers, and put it through the third and second folds, from right to left, as in ordinary herring-bone stitch, and draw the needle out; (d) take the needle up to the first row of gathers, and put it through the fourth and third folds, in a horizontal position, and then draw it out. Go on like this to the end of the first and second rows. The other rows of gathers must be herring-boned in the same way. Work the herring-bone stitch as loosely as possible.

N.B.—There are many other stitches that can be used in smocking, e.g. stitching and chain-stitch, and the designs may be varied, even though the same stitches are employed. Girls should be encouraged to invent designs, when they know how to mark off and gather the material, and smock in straight rows.

QUILTING

Method.—*Quilting the Lining of an Article*.—(a) Place the wrong side of the lining uppermost; (b) lay over it a

piece of flannel, wadding, or other soft substance; (c) tack in diagonal lines from corner to corner, at regular distances apart, and quite evenly; (d) turn the right side uppermost, and run or machine-stitch along by the tacking threads; (e) tack in diagonal line from the opposite corners, on the wrong side; (f) turn the right side uppermost, and run or machine-stitch through the two thicknesses.

N.B.—Crossing the material diagonally from opposite corners, forms squares and diamonds. Other patterns, *e.g.* octagons, flowers, birds, stars, can be employed in quilting the lining to the outer covering. Elaborate patterns are sometimes employed in quilting eider down quilts, bed coverlets, cushions, gentlemen's dressing-gowns, and women's petticoats.

Use.—Quilting is used for linings of coats, jackets, cloaks, petticoats, dressing-gowns, quilts, muffs, babies' long flannels and cloaks, bonnets and hats, to make these articles warmer, and to ornament the linings of work-baskets and boxes, cushions, and night-dress bags.

Note.—When the lining is quilted to the outer covering, the silk, cotton, or thread, which is used for the running or stitching, must be the same colour as the outer covering. Quilting is employed in the Dressmaker's, Milliner's, Tailor's, and Upholsterer's arts.

GAGING

Gaging is really gathering, worked in two or more rows, at equal distances apart, and with the stitches lying below those directly above. Gaging is worked both on single and double material, and is very suitable for the fronts of children's frocks, infants' morning gowns, the waists of woollen skirts, and for the cuffs of sleeves. If children's frock skirts are full, the gathering stitches must be made very long and on double material. Stroking is not needed for double and treble rows of gathering.

CHAPTER XXIII

BUTTONHOLE LOOPS—HOOKS AND EYES—CASING BONES

BUTTONHOLE LOOPS

A. For a hook. B. For a button.

Time.—35 minutes.

Previous knowledge.—Sewing on a button and a hook ; making buttonholes, and working blanket-stitch.

Aim of Lesson.—1. To train power of observation by showing how to make *an eye* for a hook with a needle and cotton,—simpler and neater than a metal eye ; and a way of making *a hole* for a button to pass through, different from a buttonhole.

2. To train power of comparison, by showing different ways of fastening clothing. To give an idea of what is suitable, simple, and neat.

PLAN OF LESSON

Introduction

Use.—To answer two purposes.

Preparation.—(1) Stranding to form loops ; (2) Position on bands and hems ; (3) Size of loops differs.

Stitch.—Blanket-stitch.

Apparatus.—*For Teacher.*—S.D. Frame and large bands, hook and button.

For Class.—Bands, a hook and button.

LESSON

A. *Loop for a hook.* B. *For a button.*

Introduction.—Show garments having the two kinds of loops on them.

Use.—Explain that :—(A) a buttonhole loop is used for a hook, when *the eye* is needed on the right side of the garment, where a metal eye would be unsightly and unsuitable : the loop is scarcely visible ; (B) a buttonhole loop is used instead of a slit cut through the band or hem, on delicate fabrics, such as muslins, embroidered insertions, and lace, and it is placed at the extreme edge of the band or hem.

Method.—**STEP I.**—Compare size of loop needed for a hook with one needed for a button—smaller—elicit the

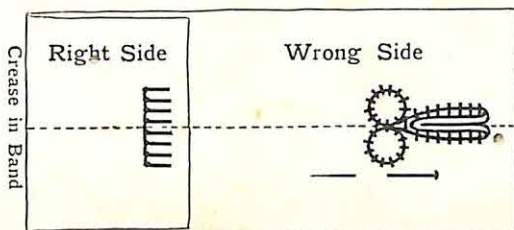


FIG. 129.

reason. Draw illustration of a band with a hook and loop on it (Fig. 129), and while doing so explain that a loop for a hook lies closer to the band, and is placed upon the band and not at extreme edge.

STEP II.—*Preparation.*—(1) Show that the strands for the loop must be made long enough for the hook to pass under easily ; (2) that hook is sewn on the wrong side of band ; (3) that loop is made exactly opposite to the hook, on right side of band ; (4) crease band across centre, fasten on cotton by a few back stitches on the wrong side of band, and bring needle and cotton through to the right side of band $\frac{1}{8}$ of an inch to left of centre crease, *a* in Fig. 130. Show by S. D. Frame how to carry strands from A to B, through the double material, and

draw each strand quite tightly, in order that it may lie close to the band. Make three or four strands $\frac{1}{8}$ of an

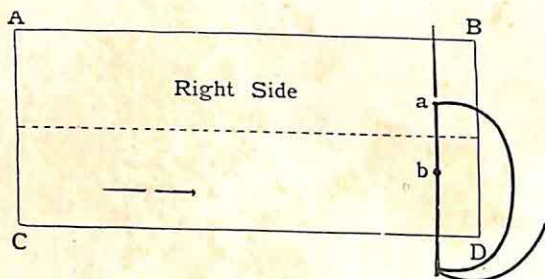


FIG. 130.

inch on either side of centre crease (Fig. 130), finally bringing cotton up to the right side at A.

STEP III.—*Blanket-stitch*.—Hold edge of band, B D, upwards, and work blanket-stitches over the strands thus:—Begin at A and draw cotton downwards under left thumb as in overcasting raw edges of print patch. Put needle under all the strands of cotton, and draw it

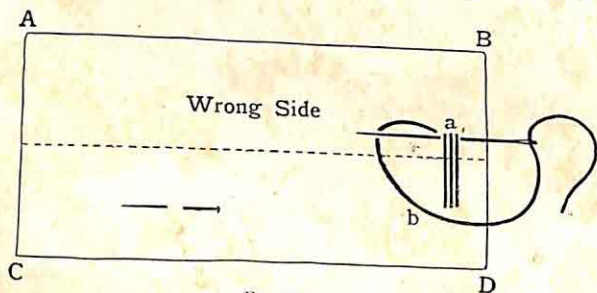


FIG. 131.

out above loop of cotton under left thumb, and pull stitch up to strands quite tightly. So on till corner B is reached, and fasten off securely on wrong side of band. If the blanket-stitches are worked in this way, the inner

edge of strands is protected by half-knotted loops, and bears the constant friction of hook.

N.B.—Examine, question, elicit reasons for doing, at every stage of lesson.

B. For a button.

Method.—STEP I.—Draw illustration of a band, with a button sewn on, and a loop at one edge (Fig. 132).

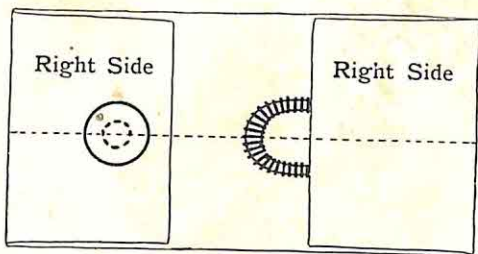


FIG. 132.

STEP II.—Compare size of loop; position and appearance of it with loop for a hook; and elicit that it is larger; at extreme edge of band; looser; reasons for all this.

STEP III.—Show that button is sewn on the right side of band; explain that loop is needed at end of band, in order to be able to use the full length of it (a hole cut upon band must lie a little distance from the edge). Point out that this loop must be large enough to go over a button, and that this kind of loop is worked at edges of silk and muslin bands, as well as insertions. Crease band across its length.

STEP IV.—*Preparation.*—(1) Show by the Demonstration Frame, as well as a large band, how to strand at edge. Fasten on as for seaming at the outer edge $\frac{1}{8}$ of an inch away from centre crease (at *a*, Fig. 133); then carry needle to edge of band at *b*, and put needle quite through edge, and

drawing cotton so that a loop is made. Fit this loop over the button to see that it is the correct size. Go on making three or four such loops all the same size (Fig. 133).

N.B.—Show on board that in each kind of loop the strands must be placed at *equal* distances on either side of centre crease, whatever the distance required.

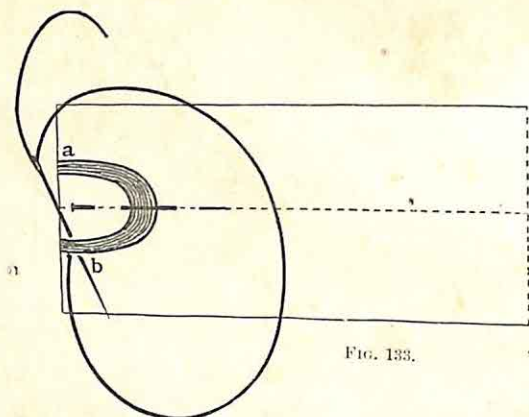


FIG. 133.

STEP V.—*Blanket-stitch*.—The cotton is coming out of edge of band at *b*. Draw all the strands carefully in on the band, and place a pin through a small piece of band, *and over* the strands of loops, to keep them stationary while buttonholing. Proceed as in loop for hook—pulling the blanket-stitches quite tight, and placing them very close together. Shift the pin now and again. Be careful to put the needle *under all the strands*, and not through the band. Fasten off at *a*, very securely, by seaming stitches at top edge of band. The stitches worked thus leave knotted loops at outer edge of strands, and the *loop* bears friction of edge of button.

N.B.—1. Examine, question, elicit, as in previous lesson.

2. Buttonhole-stitches can be used instead of blanket-stitch.

SEWING ON HOOKS AND EYES (Figs. 134 and 135)

Class.—Upper Classes in Girls' Schools, Pupil Teachers, and Student Teachers.

Method.—Hooks and eyes should be thickly oversewn with flourishing, or linen thread, or silk, the same colour

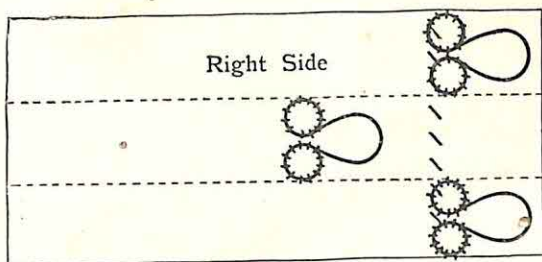


FIG. 134.

as the dress, (when they are placed down the front of the bodice), at the hook and eye portions. They must be

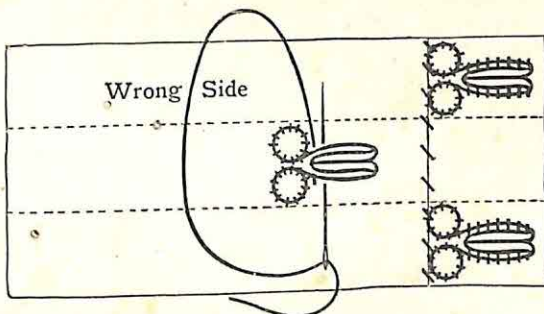


FIG. 135.

strongly fastened to the dress, and to bands by closely over-sewing the under part of the hook, *i.e.* the shank, and the ring portions of both hook and eye, with strong thread,

cotton, or silk twist (Figs. 134 and 135). Show eyes and hooks sewn on Petersham belting for a dress skirt. The eyes are sewn on to right side of band, and hooks on the wrong side. When placed thus, the band must be creased into three equal parts, in order that the hooks and eyes properly face each other. The dotted lines represent these creases.

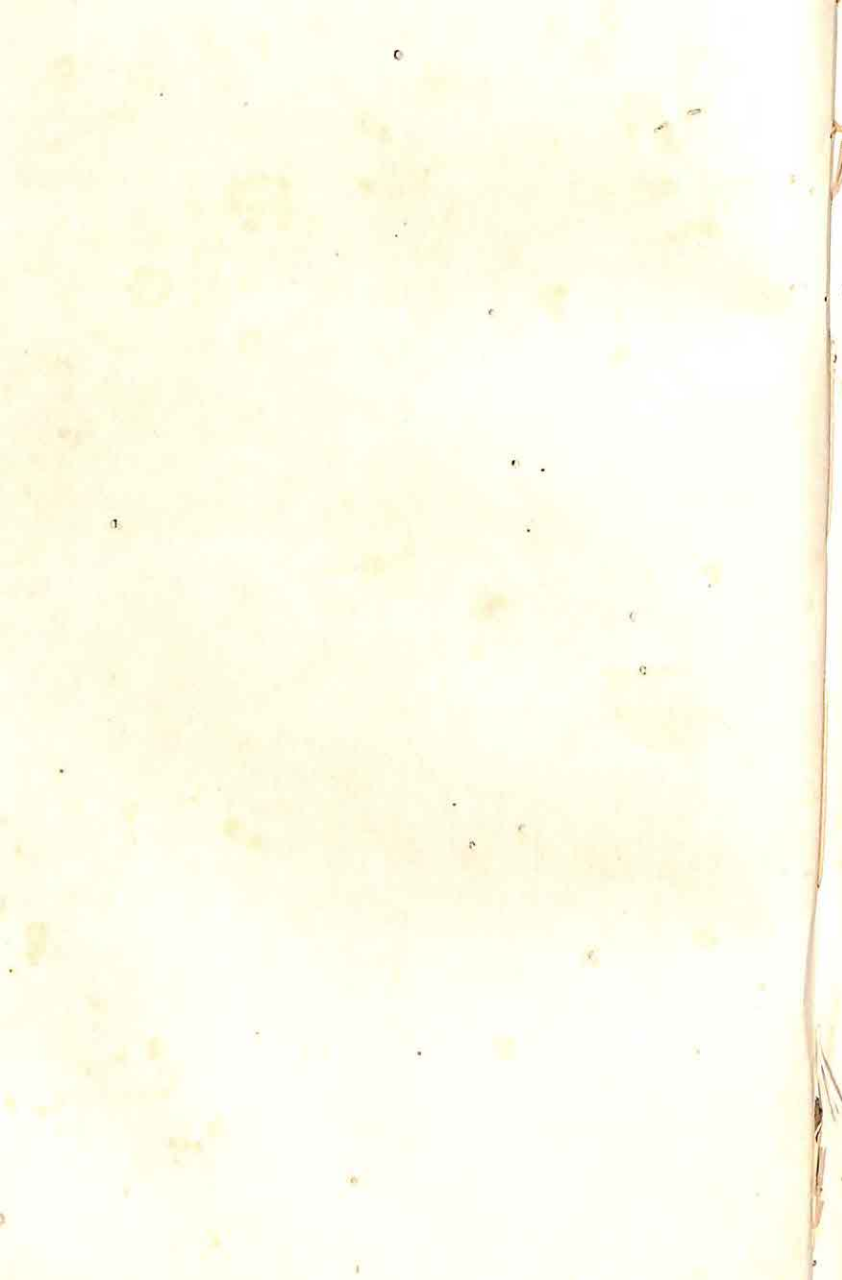
CASING BONES

Method.—(a) Cut the whalebone the length of the bodice seams from the dart points, and under the arms, and middle of back to the edge of the bodice, before the false hem is added; (b) then cut pieces of lining like that used to line the skirt of the dress, in strips longer than the bones, and wide enough to allow of turnings, and to well cover the bones; (c) turn down one fold on the selvedges of the linings or casings, and on the width of them top and bottom, and lay the casings over the seams, on the wrong side, and then fell, or run them very neatly at the selvedges and bottom fold, to the dress material and its lining, just inside the overcast edges; (d) see that the ends of the bones are well rounded and pared of all splintered pieces, and push them between the casings and the seams; (e) then fell the tops of the folded casings very closely and neatly over the edge to the bodice.

N.B.—Casings of tape or silk binding can be purchased for this purpose, but those made from strips of skirt lining are more economical, and more durable.

PART II

KNITTING, NETTING, CROCHET, AND
STRAW-WEAVING



CHAPTER I

KNITTING—TERMS IN KNITTING

KNITTING was unknown in England, until the middle of the sixteenth century. The Scotch lay claim to its origin, but its invention is generally attributed to the Spaniards. Knitting was certainly practised in Spain and Italy, before it was known in England. Historians tell us that Mistress Montague, Queen Elizabeth's silk-woman, presented Her Majesty with a pair of knit silken hose in the year 1561. Before knitting was introduced into England, stockings were made of cloth sewn together. Knitting was not long in use, before the stocking-frame was invented, in 1589, by William Lee, M.A., of St. John's College, Cambridge, a native of Woodborough, near Nottingham. The story of this invention is very interesting. It is said that William Lee was expelled from the University for marrying, contrary to the statutes of his College, and that he was compelled to live by what his wife could earn by knitting stockings. "In the Framework Knitters' or Stocking Weavers' Hall is a portrait of William Lee pointing to one of his frames, and discoursing with a woman, who is knitting with needles in the usual way. The picture bears the following inscription: 'In the year 1589 the ingenious William Lee, M.A., of St.

John's College, Cambridge, devised this profitable art for stockings (but being despised, went to France), yet of iron to himself, but to us and to others of gold, in memory of whom this is here painted.' — *Hatton's New View of London*, 1708.

Her late Most Gracious Majesty, the good and great and venerated Queen Victoria, and Her late Royal Highness Princess Mary, Duchess of Teck, were industrious knitters,¹ and interested in needlework of all kinds. Our Gracious Queen Alexandra, and many of our Royal Princesses countenance this homely art, and patronise and encourage every effort that is made to foster it. The number of flourishing Needlework Guilds is sufficient evidence of the interest taken in needlework, knitting, and cutting-out, by royal and noble ladies.

It may not be generally known that the Turkish Fez is at first knitted, then felted, blocked, dyed, and marked with the owner's cypher.

Barège, at the foot of the French Pyrenees, is noted for a peculiar kind of knitting. The knitting of the Shetland Isles, and of Dumfriesshire, has long been celebrated, as well as that of Wales and Cornwall.

¹ "The Duke of York spied amongst the crowd a man wearing a specially coloured scarf. Going up to him the Duke said, 'I am glad to see you wearing that scarf, my man. I recognise it as one worked by my dear grandmother, the late Queen, for those who had done some special service. Come and let me introduce you to the Duchess.' Saying which he led the man by his elbow to the Duchess, and left him there. On her part the Duchess talked most kindly and unaffectedly, and, with tears in her eyes, she told how that she had herself often taken up the stitches which the poor tired fingers had let drop, adding, 'Your scarf must be one of the six scarves (there were but six of them) which the dear Queen was knitting before she died. They were her last pieces of work.' — *Daily Telegraph* on Duke and Duchess of York's Colonial Tour in 1901.

In former days, knitting was chiefly used for the manufacture of stockings and socks, and even now, in spite of the loom and knitting machines, hand-knit stockings, socks, vests, jerseys, petticoats, shawls, and many other useful and ornamental articles are in great request. No garments are so warm or so durable as knitted ones. Knitting, in addition to its practical value, is an easy and pleasant pastime, that can be taken up at odd moments, and even carried on while talking or reading. Each member of a family ought to have a stocking or sock in hand to take up in idle moments, by which means many pairs could be completed during the year.

Definition.—Knitting is the art of uniting wool, cotton, silk, and other materials into a network by needles or pins, without the aid of a loom.

Explanation of Terms.—*Needles* are usually made of steel, and are pointed at both ends. *Pins* are made of steel, wood, bone, india-rubber, and other substances, and have a round knob at one end only.

To Cast On is to make the first network of stitches on the needles or pins.

To Cast Off is to knit two stitches, and to pass the first over the second, securing the last stitch by drawing the wool through it.

Purl, Pearl, Seam, Rib, and Turn Stitch all mean the same thing. This stitch is knitted by bringing the wool in front of the needle.

To Narrow is to decrease or lessen by knitting two stitches together.

To Widen is to increase the number of stitches, and is generally done in the middle of a needleful of stitches. There are various ways of widening. (1) By putting the wool in front of the needle, before knitting the next stitch.

This is called *making a stitch*, in fancy knitting. (2) By taking up on the left needle the crossing-stitch between two stitches and then knitting it. (3) Sometimes widening is made to form a gradual slope, as in making a simple shawl pattern. It is then done at the end of a needle thus:—knit the last loop without slipping it off the needle, then put the right-hand needle into the same loop, and in order to give a twist to the wool knit the second loop from the back of the loop on the left needle. In concise terms, this is knitting two loops out of the last one.

Welting or Ribbing is usually knitted at the top of stockings, socks, muffatees, and sometimes throughout a garment, to confine the article to the body, from its tendency to contract. Ribbed knitting is a mixture of plain and purl stitches, worked in alternate rows. Ribbed knitting is warmer than plain knitting.

A Row is the name given to the stitches from one end of the needle to the other.

A Round is the name given to the stitches on two, three, or more needles; it is sometimes called a *Bout*.

A Turn is used for two rows in the same stitches backwards and forwards.

Slipping a Stitch is to take a loop off the needle without knitting or purling it.

Materials.—For *men's and boys'* coarse winter stockings and socks, Alloa Worsted, four or five ply, Scotch fingering and Welsh Yarn are the most suitable. For *women's and girls'* stockings four-ply Merino, three-ply Scotch fingering, German Yarn, or Beehive wool.

For *Infants'* socks, Andalusian, or fine Merino wool is best. Single Berlin is used, but it shrinks very much in the washing.

Materials commonly used in stockings and socks for summer wear are Angola, Summer Merino, Andalusian, Cotton (white and unbleached), Shetland, Lady Betty, fine Scotch fingering, Silk, and Strutt's coloured knitting cottons, ingrain dyes.

The needles and knitting materials must, as a rule, agree in size, fine needles must be used for fine materials, except when workers knit very loosely or very tightly. Tight knitters should use needles a size larger than those ordinarily suited to the size of the wool or cotton, and loose knitters should use needles a size smaller than that suited to the knitting materials. A Bell gauge is most useful for knitters, to test the size of the needles and pins.

CHAPTER II

KNITTING-PIN DRILL—MAKING A SLIP-KNOT LOOP

Class.—Infants.

Apparatus.—*For the Teacher.*—Two knitting-pins of wood, bone, or very coarse steel, and very coarse knitting cotton or fleecy wool.

For the Children.—Short, coarse, blunt-pointed steel pins, and coarse knitting cotton.

Method.—1. Give the children one knitting-pin with a loop on it, and tell them they are going to learn how to hold this pin and the cotton properly, before they learn how to knit loops.

2. Compare the knitting-pin with an ordinary pin, and elicit that the knitting-pin has two points, while the ordinary pin has a head and one point.

3. Tell children knitting-pins are very often called knitting-needles.

4. Show the class a strip of knitting, or a kettle-holder, or duster made of knitted strips sewn together; and tell them they will soon be able to knit useful things, like these.

The Left-hand Drill.—Show (a) how to take up the knitting-pin with the left-hand thumb and forefinger just where the loop is resting on the middle of the pin; (b) how to put out the three fingers of the left hand, and close them round the pin; (c) how to push the pin down the left hand, till the loop is near the point, with right thumb and forefinger.

The Cotton.—There are a short and a long end of cotton hanging from the loop; show children (a) how to put the short end of cotton into the left hand, under the pin; (b) how to put out the last three fingers of the right hand and catch hold of the long end of cotton near the pin; (c) how to curve the right forefinger prettily, and put it under the cotton close to the loop; (d) how to bring the thumbs together, to keep the hands steady, while putting the cotton round the pin. Repeat these actions, the children working with you till they are expert.

N.B.—If the children are old enough, bright and intelligent, ask them to describe what they must do in this part of the drill.

The Right-hand Drill.—Give the children a pin without a loop; (a) tell them to put it on the desk, so that it may lie like the figure 1; (b) tell them to raise right hand and close all fingers into the palm, except thumb and forefinger; (c) show how to curve the right thumb and forefinger towards the bottom point of the pin, and then (d) how to lift it with the right thumb and forefinger, moving the hand upwards, so that the longer part of the pin falls

towards the right arm, like a pen or pencil. Repeat, children working with you until they can lift the pin prettily and easily.

N.B.—Call some of the children out, to see what a pretty drill this is, when all the children work together.

Knitting a Loop.—Give the children for this lesson two knitting-pins, one with a loop on it, and tell them they know how to hold the knitting-pin and cotton correctly, and now they are going to learn how to knit a new loop out of the loop on the pin. When both the pins and the cotton are in position, then demonstrate the method of knitting a new loop thus: show the children (*a*) how to put the right-hand pin into the front part of the loop that is on the left-hand pin, and then how to loosen this loop that you may see the right-hand pin is really *IN* the loop. (Repeat slowly, the children working with you. Go in and out among the children, to see that they have put the right-hand pin *IN* the loop.) (*b*) How to bring the thumbs together, and let them rest on the left-hand forefinger while putting the cotton round the right-hand pin. (Repeat, the children working with you.) (*c*) How to lift the cotton, which is lying on the right-hand forefinger, round the point of the right-hand pin, so that the cotton comes between the pins.

Show again, the children working with you. Examine children's work, to see if cotton is lying between the pins, and say *ROUND*, and lift the cotton off each time this action is repeated. (*d*) How to raise the left forefinger and put it under the right-hand pin, to help to push it and the cotton on it through the loop, towards the worker, the right wrist being at the same time moved outwards. Show again, and call this action *LOOP THROUGH*, the children working with you. (Examine

to see if each child has two loops, one on the right-hand pin and one on the left.) (e) How to push the left-hand pin down through the first loop with the right forefinger, and call this action SLIP OFF. Demonstrate again, the children working with you. (Examine to see that every child has one loop on the right-hand pin; and draw children's attention to the fresh loop being on the right-hand pin, and the first loop being woven round it below, like the link of a chain.) Tell children to put pins on the desks.

When every step of the drill has been demonstrated, explained, and recapitulated, and the children are sufficiently familiar with it to be able to tell the teacher what to do from the beginning to the end, the teacher might drill the class as follows:—

1. Left-hand pin—in position.
2. Short end of cotton—under the pin.
3. Right-hand pin—in position.
4. Catch hold of long end of cotton—with three fingers.
5. Put right-hand forefinger—under the cotton, near the loop.
6. Put right-hand pin—IN the loop.
7. Bring thumbs—together.
8. Lift the cotton—ROUND the right-hand pin.
9. Bring the right-hand pin, with the cotton on it—THROUGH.
10. Slip the first loop—OFF the left-hand pin.

N.B.—Or the teacher may count from numbers 1 to 10, and the class describe the actions, and then do them.

Notes.—1. When the pin is held in the right hand like a pencil, it is called *overhand* knitting (Fig. 136).

2. It is difficult to state the number of lessons that it would be necessary to give in order to make the children thoroughly

expert in this drill. Bright, intelligent children would probably learn the details in six or eight lessons. Infant teachers know only too well how often they are compelled to go over the same ground, and what resources they need, to make children commit any drill to memory.

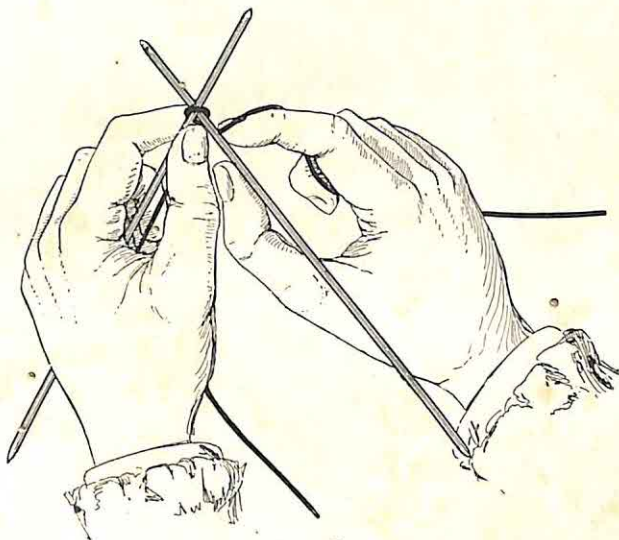


FIG. 136.

MAKING A SLIP-KNOT LOOP FOR KNITTING

Class.—Any Infant Class.

Apparatus.—*For Teacher and Children.*—One knitting-pin and about one yard of knitting cotton.

N.B.—The right forefinger may be used instead of a knitting-pin.

Method.—Show (1) how to take up the cotton, near one end, with the right thumb and forefinger, and place it between the left thumb and forefinger, so that the longer

piece of cotton lies across the palm of the hand. Demonstrate again, the children working with you. Examine.

2. How to carry the long end of cotton round the back of the hand, and bring it to the front, so that it crosses the cotton which is lying between the left thumb and forefinger. Demonstrate again, the children working with you.

3. How to take up the knitting-pin like a pencil; and how to put the end of the pin, coming out from between the right thumb and forefinger, under the cotton, lying on the palm of the hand; then how to draw this cotton away from the hand a little distance, and turn the knitting-pin back towards the middle of the left arm, lifting at the same time the longer piece of cotton up on the pin, to form a loop. Demonstrate again, the class working with you.

4. How to close in all the fingers of the left hand, and draw them out of the ring of cotton that lies round them. Demonstrate again, the children working with you. Examine.

5. How to hold the short end firmly, with the left thumb against the forefinger; then put out the other fingers and catch hold of the long end of cotton, and draw the knitting-pin upwards, to form a slip-knot. Repeat, the children working with you. Examine.

6. How to drop the short end of cotton; and then draw the longer end, till the loop rests securely on the right-hand pin. Repeat, the children working with you.

7. Illustrate the slip-knot on the slate (Fig. 139).

When every action has been demonstrated and explained, the teacher may drill as follows:—

1. Put short end of cotton between the left thumb and forefinger.

2. Carry the long end round the hand, or three fingers, till it crosses the cotton—between the left thumb and forefinger.

3. Take up the knitting-pin—and put it under the cotton lying on the palm, or fingers.

4. Turn the knitting-pin back, and lift up the cotton—to form a loop.

5. Close in all the fingers—and draw them out of the ring of cotton.

6. Put out the fingers—and catch hold of the long end of cotton.

7. Draw the knitting-pin upwards to form a slip-knot.

8. Drop the short end of cotton, and pull the long end—so that it rests on the pin.

9. Show pin—with loop on it.

10. Lay the pin and cotton down.

CHAPTER III

KNITTING.—*Garter Stitch, Chain Edge, Casting on, Casting off*

PLAIN KNITTING OR GARTER STITCH

Class.—Five and six year old children.

Apparatus.—*For the Teacher.*—Twelve loops cast on and about 3 inches knitted, either in very coarse knitting cotton or bright-coloured wool, two knitting-pins.

For the Children.—Twelve loops cast on, and about 2 inches knitted, and knitting-pins (Fig. 137).

Method.—1. Show children a completed garter, a bath-towel or duster made of knitted strips sewn together, and tell them they are going to learn how to knit, that they may make useful things like these.

2. Recapitulate Knitting-pin Drill, as far as making a new loop.

3. Show children how to put the left thumb behind the loop they are going to knit, so that when they slip the loop off they will not drag the other loops off with it.

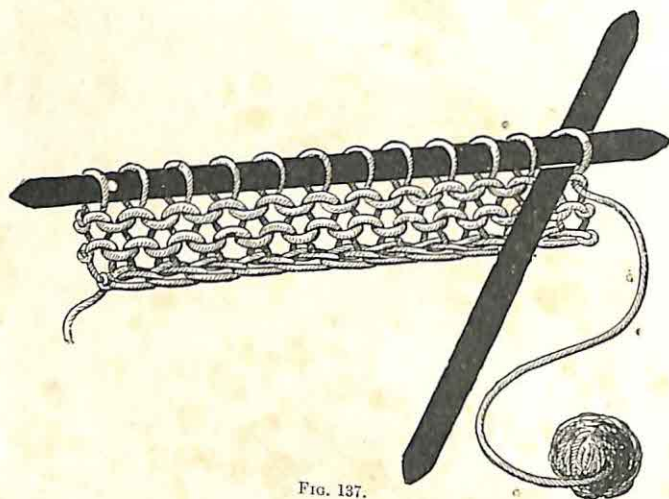


FIG. 137.

this loop off they will not drag the other loops off with it.

4. Repeat the drill for knitting a loop:—

(a) Right-hand pin—IN.

(b) Cotton—ROUND.

(c) Loop—THROUGH.

(d) Slip—OFF.

5. Show children that there is *one* new loop on the right-hand pin, and *eleven* on the left-hand pin, and that

these must all be knitted off, one by one, so that there will be *twelve* loops on the right-hand pin.

6. (a) Show again how to put the left-hand thumb behind the loop that is to be knitted; and (b) recapitulate the drill for making a loop, the children working with you, till all the loops are knitted off the left-hand pin on to the right-hand pin; (c) tell children to put their knitting down.

7. Recapitulate Knitting-pin Drill each time a row is started, and work with the children, telling them to put their knitting down at the end of every row.

8. When children have worked several rows, and can knit without much help, then show them how to exchange pins dexterously, *i.e.* (a) to pass the pin with the twelve loops on it into the left hand, and (b) to draw out the pin from the left hand, and hold it like a pen or pencil in the right hand.

N.B.—Demonstrate slowly, patiently, carefully, and examine very often.

Note.—If the Knitting-pin Drill is made the basis of all early lessons in knitting, the slow children gain confidence, and are spurred on by the example of the quick ones, and order is secured at once. When children are told to work on alone the teacher is free to go in and out among them to correct mistakes, and to help the backward ones.

KNITTING (*Chain Edge*)

Class.—Infant and Girls' Schools.

Apparatus.—*For the Teacher.*—Twelve loops cast on in bright-coloured wool, and a few rows knitted, with *chain edge*.

For the Children.—Twelve loops cast on in wool or cotton, and a few rows knitted with the *chain edge*.

Method.—1. (a) Show two strips of knitting, one with a chain edge and one with an irregular edge, and elicit which is the neater of the two; (b) explain that strips with a chain edge can be more neatly and regularly sewn together to form such articles as bath-towels,

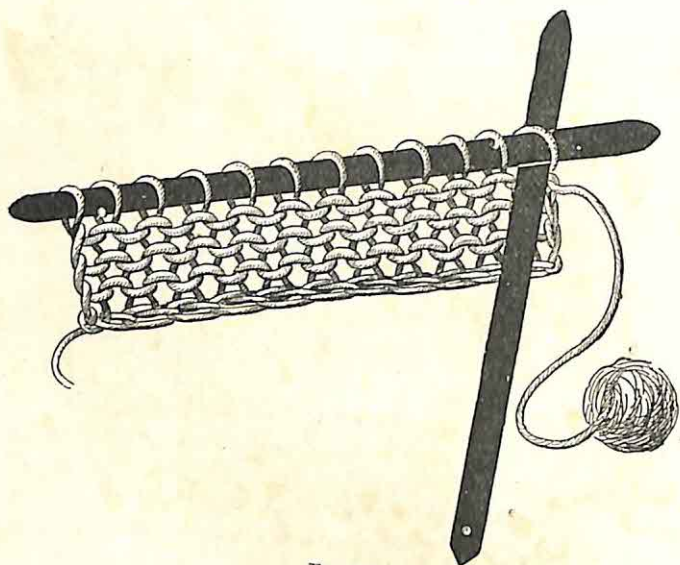


FIG. 138.

dusters, caps, cuffs, bed-quilts, cushion-covers, kettle-holders, etc.

2. (a) Write *chain edge* on the slate; and (b) tell children this edge is so called, because it looks like the links of a chain.

3. Draw an illustration on the slate of the piece of knitting given to the children (Fig. 138).

N.B.—Tell children there are two ways of making chain edge in knitting, but that they are going to learn one way only. The two methods in ordinary use are :—

1. To purl the last stitch in every row, and slip this stitch at the beginning of the next row.
2. To slip the first stitch in every row, as for purling, in the following manner :—(a) put the right-hand pin under the cotton first ; (b) put the right-hand pin through the front part of the loop, from the right to the left, so that right-hand pin rests on the top of the left-hand pin ; (c) put cotton round right and left hand pins, at the same time, from the left to the right ; and (d) slip both loop and cotton off together. The cotton is now behind the right-hand pin, and the children can proceed to knit off the loops to the end of the row in plain knitting.

Purling the Last Stitch for Chain Edge

Method.—1. Recapitulate Knitting-pin Drill as far as beginning to knit.

2. Show children how to slip the first loop off, without knitting it.

3. Recapitulate Plain Knitting, till the last stitch in the row is reached.

4. Tell children they are going to learn a new way of knitting this loop, called *purling*.

Write the word *purling* on the slate.

5. (a) Show children how to bring the cotton which lies behind the right-hand pin to the front of it ; (b) how to put the right-hand pin through the front part of the last loop, so that the right-hand pin rests on the top of the left one, in a slanting direction over the forefinger ; (c) how to put the cotton behind the right-hand pin, and bring it round to the front again ; (d) how to put the left thumb on the right-hand pin, and push it through the loop outwards, or away from them ;

(*N.B.*—Contrast this with plain knitting, where the loop is brought towards the worker.)

(*e*) how to slip the loop off.

6. Recapitulate *purling*, the children working with you. Examine children's work.

7. (*a*) Show how to exchange pins; (*b*) how to slip the first stitch off as for plain knitting, and knit on till the last stitch is reached, then demonstrate the method of purling once more. Examine continually.

Note.—Purling the last loop in order to get chain edge is more difficult than slipping the first loop, purlwise, but if children are taught this latter method, they are likely to slip the loops they ought to purl, when they are knitting purl and plain in combination.

CASTING ON IN KNITTING

Class.—In Girls' School.

Apparatus.—*For the Teacher.*—Two very coarse knitting-pins and coloured wool, slate and coloured chalks.

For the Children.—Two knitting-pins and a length of knitting cotton or wool.

Method.—1. Recapitulate the lesson on making a slip-knot loop (Fig. 139).

2. Tell children they are going to learn how to begin their own work by casting on to the left-hand pin every loop they knit, till they have enough.

Write the words *Casting on* on the slate.

N.B.—There are different methods of Casting on, but the simplest and best is by knitting the loops and casting, *i.e.* throwing them on the pin.

3. Illustrate the slip-knot loop off, and on, a knitting-pin (Figs. 139 and 140).

4. Recapitulate Knitting-pin Drill as far as knitting a new loop out of the one on the left-hand pin (Fig. 141).

5. Show children how to put the new loop ON the left-hand pin thus:—(a) bring the left-hand pin to the front of the right-hand one and put it IN the loop at the side nearest the right thumb, so that the new loop is slightly twisted, and the right-hand pin rests on the top

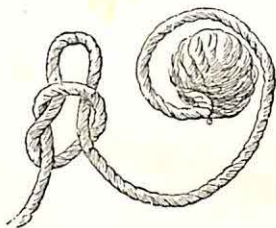


FIG. 139.

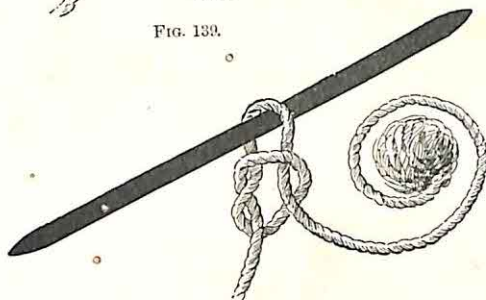


FIG. 140.

of the left-hand one, and say ON; (b) draw out the right-hand pin, but do not let the cotton fall off the right forefinger; (c) call the children's attention to two loops being on the left-hand pin.

6. Recapitulate till six loops are cast on, then show children how to put the right-hand pin under the left-hand pin, instead of taking it out of the loop each time a loop is cast on (Fig. 142).

7. Let children cast on twelve loops, working with them all the time (Fig. 143).

CASTING OFF IN KNITTING

Class.—Girls.

Apparatus.—*For the Teacher.*—A coarse strip of knitting, nearly completed.

For the Children.—A strip 15 inches long.

Method.—1. Show the children some completed strips,

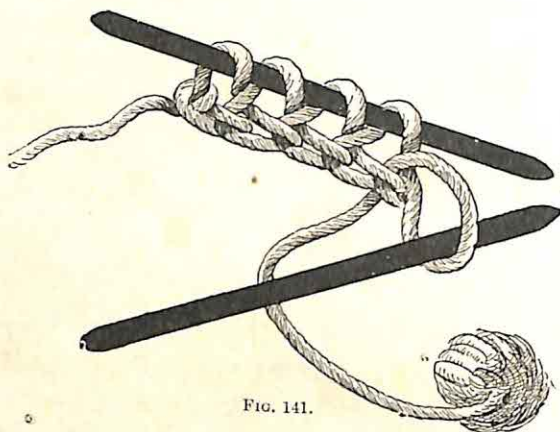


FIG. 141.

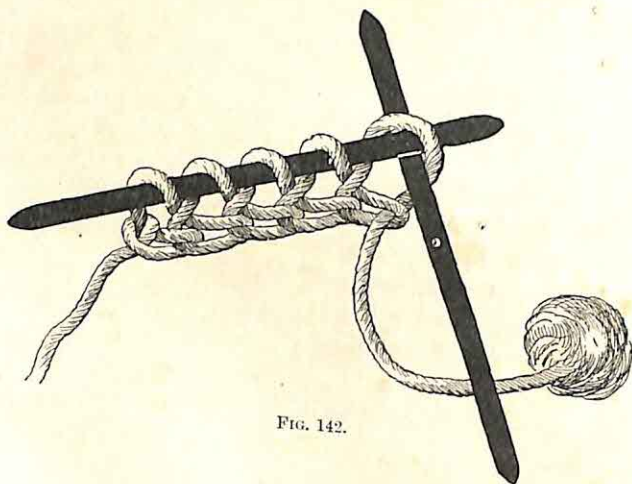


FIG. 142.

or a cuff, and call their attention to the neat way in which they are finished off.

2. (a) Tell them their strips are long enough, and they must learn how to fasten them off neatly and strongly; (b) that fastening off in knitting is called *casting off*; (c) write this term on the slate.

3. Explain that casting off must be done loosely, or the top of the strip will be made narrower than the bottom.

4. Start the lesson with Knitting-pin Drill, and when the children are ready to knit, demonstrate as follows:—

(a) Slip the first loop.

(b) Knit the second loop.

(c) Bring the left-hand pin to the front of the right-

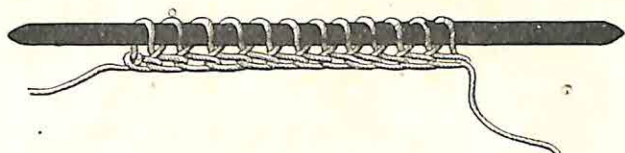


FIG. 143.

hand pin, and point it towards the right thumb, putting it IN the loop nearest the right thumb, from left to right.

(d) Lift the loop which is on the left-hand pin over the loop from which the cotton is coming, and draw the right-hand pin with its loop THROUGH, very loosely.

(e) Let children see that two loops have been made into one.

(f) Repeat actions (a), (b), and (c), the children working with you. Examine children's work.

5. Knit the next loop, and recapitulate the whole of the method (a), (b), and (c).

6. Proceed in this way, till only one loop remains on the right-hand pin.

7. Tell children to put left-hand pin down, and then show them (a) how to put the cotton over the back of the

left hand; (b) how to draw the cotton through the last loop with the point of the pin, so as to make a long loop. Repeat, the children doing the same.

8. Draw the long loop out entirely, if the cotton or wool is nearly used up; if not, cut the loop, and draw the end of cotton belonging to the ball, downwards, and

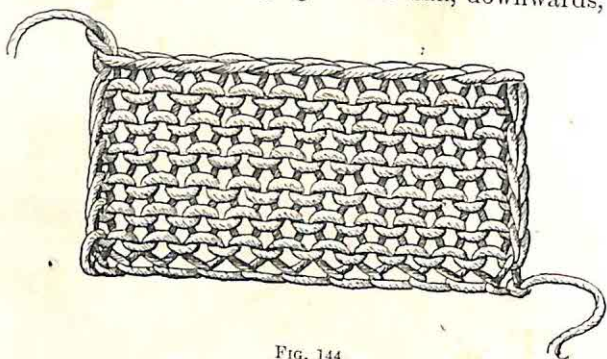


FIG. 144.

the short end coming out of the loop, upwards, tightly. Recapitulate, children doing the same.

CHAPTER IV

PURL AND PLAIN KNITTING—CASTING ON THREE NEEDLES —JOIN IN COTTON AND WOOL

PURL AND PLAIN KNITTING

Class.—Girls.

Apparatus.—*For the Teacher.*—Two knitting-pins, cotton or wool, slate and chalks.

For the Children.—Two knitting-pins, cotton or wool.

Method.—1. (a) Show children a knitted garment, *e.g.* a ribbed cuff, sock, or cap, to show the use of purl and

plain knitting; (b) show by putting the cuff on your arm that this kind of knitting is like elastic, because it stretches very much and then contracts, so that when it is worn on the body it fits closely and is warmer than plain knitting; (c) explain that *purl* is a wave-like arrangement of the loops, and that it is sometimes called *ribbed* knitting (*turn-stitch* or *seam-stitch*, when it is placed at the back of a sock or stocking), and that the ribbed top of socks and stockings is called the *welt*.

2. (a) Recapitulate making a slip-knot loop and casting

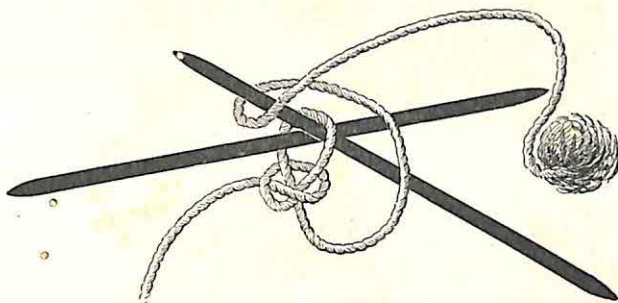


FIG. 145.

on; (b) let children cast on twelve loops loosely, and then knit eleven loops plain; (c) purl the last loop thus:— (1) bring the cotton to the front of the right-hand pin, and the right-hand pin in front of the left-hand one; (2) put the right-hand pin in the front part of the loop, from right to left; (3) put the cotton to the back and round the point of the right-hand pin, so that it is brought in front again; (4) put the left thumb on the right-hand pin and push it with the cotton on it through the loop outwards, and then slip the last loop off the left-hand pin.

3. Draw an illustration of the position of right-hand pin and the cotton for purling (Fig. 145).

N.B.—If the children have been taught to purl the last loop in a row, for the purpose of making chain edge, the method of purling will only need recapitulation.

4. The first row is now knitted off the left-hand pin on to the right-hand one. Recapitulate exchanging pins, and then proceed as follows:—

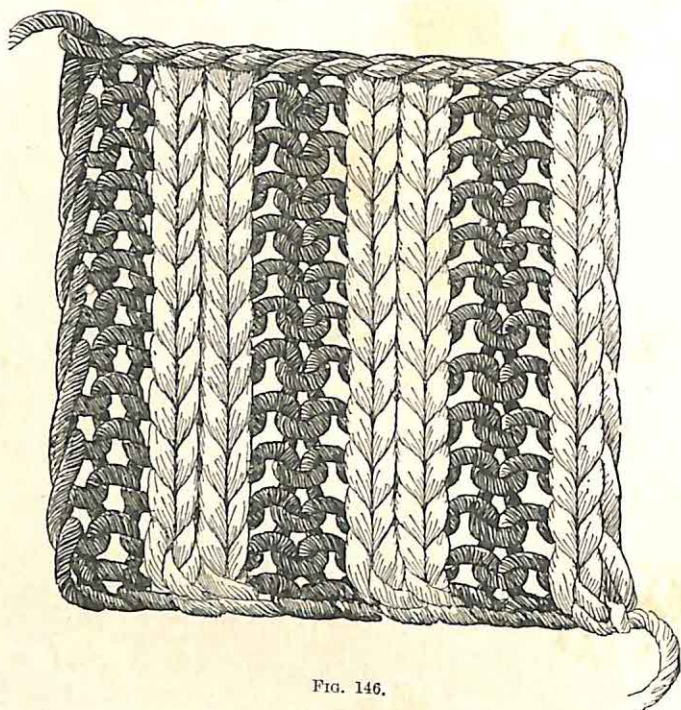


FIG. 146.

- (1) Slip the first loop and knit the next plain.
 - (2) Recapitulate the method of purling, as explained in No. 2 above. Purl two loops.
 - (3) Knit two loops plain.
- Go on knitting two plain and two purl, recapitulating the method of purling, till all the loops are knitted off.

5. Explain that ribbed knitting can be made of any number of purl and plain loops, but that two plain and two purl makes a pretty rib, and is easy to remember.

6. Recapitulate the method of purling, till you are sure the children can purl the right loops without any demonstration.

7. Point out that the sides are in chain edge.

8. When the specimen, or cuff, is long enough, recapitulate casting off.

9. Demonstrate very clearly, slowly, and patiently all through. Examine children's work often, and question them on the use of purl and plain, and on the difference between purl knitting and plain knitting; elicit that the knitting is a mixture of the right and wrong sides; that both sides of the garment are alike, for what is plain on one side is purl on the other, and *vice versa*.

Note.—If the children have been taught to make chain edge, by slipping the first loop purlwise, then, after casting on twelve loops, let them knit these off the left-hand pin on to the right-hand one, exchange pins, and begin the second row thus:—

1. Slip the first loop purlwise.

2. Knit the second plain.

3. Purl the third and fourth loops, the teacher demonstrating the actual method of purling as described in No. 2 above, and contrasting the knitted purl loop with the slipped purl loop, at the beginning of the row.

CASTING ON THREE PINS FOR ROUND KNITTING

Class.—Girls.

Apparatus.—*For the Teacher.*—Four knitting-pins, cotton or wool, slate and chalks, a cuff or a sock to show the use of knitting in rounds.

For the Children.—Four knitting-pins, knitting cotton or wool.

Method.—1. Explain the difference between knitting in rows and knitting in rounds, and show that no seams are needed in garments that are made of knitting in rounds.

2. (a) Recapitulate making a slip-knot loop and casting on; (b) tell children to cast on ten loops on one pin, and explain that casting on for round knitting should be rather tight to prevent a roll at the top; (c) illustrate on the slate one pin with ten loops on it (Fig. 147).

3. (a) Take the second pin and knit a loop out of the first one on the left-hand pin; (b) put the second pin with the new loop on it into the left hand, under the first pin, being careful not to twist the loop on it, and letting the point of the second pin come beyond the point of the first one. Demonstrate again, the children working with you.

4. Examine the children's work.

5. (a) Show how to knit a loop out of the loop on the second pin by putting the third pin in the under part of the loop; (b) how to cast this new loop on to the second pin. Tell children they must be careful not to put this loop on the two pins, but on the second one only.

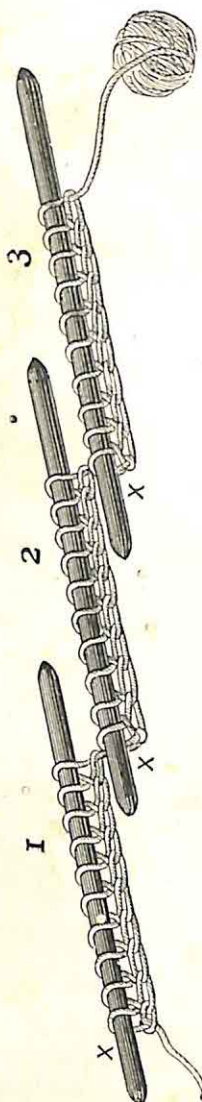


FIG. 147.

Repeat, children working with you, till ten loops are cast on the second pin.

Examine children's work.

6. Illustrate on the slate (Fig. 147).

7. Show children how to keep the first and second pins in the left hand, the second lying below the first.

8. (a) Show how to knit a loop out of the first loop on the second pin with the third pin; (b) how to turn the third pin round into the left hand, without twisting the loop on it, and letting it lie below the second pin. Repeat, the children working with you. Examine children's work.

9. Illustrate the three pins with loops on, as they are resting on the left hand (Fig. 147).

10. (a) Show how to place pin No. 2 \times under the point of No. 1 \times , and (b) No. 3 \times under the point of No. 2, taking great care not to twist the loops.

N.B.—This part of the lesson will need much patient and frequent demonstration. Examine often.

11. Illustrate the three pins in proper position (Fig. 148).

12. Show children how to hold the three pins in the left hand ready for knitting round thus:—(a) catch hold of pin No. 1, near the loop with short end of cotton coming from it, with left thumb and forefinger; (b) put the pin No. 2 between the middle and third finger; (c) and pin No. 3 between the forefinger and middle finger; (d) put the short end of cotton and the long end behind pin No. 3, and draw pins Nos. 1 and 3 very closely together. Patiently and frequently demonstrate, till children can hold the pins properly; (e) show children how to knit with pin No. 4 five loops with the double wool, then to drop the short end, and go on knitting with cotton from the ball.

13. Work with children, till the ten loops are knitted off pin No. 1, then show again how to draw pins Nos. 1 and 2 close together.

N.B.—Explain why the pins must be drawn so tightly together when they meet, viz. to prevent *ladders*, i.e. loose loops, which are very unsightly up the sides of cuffs, socks, or stockings.

14. Recapitulate till loops are knitted off pin No. 3,

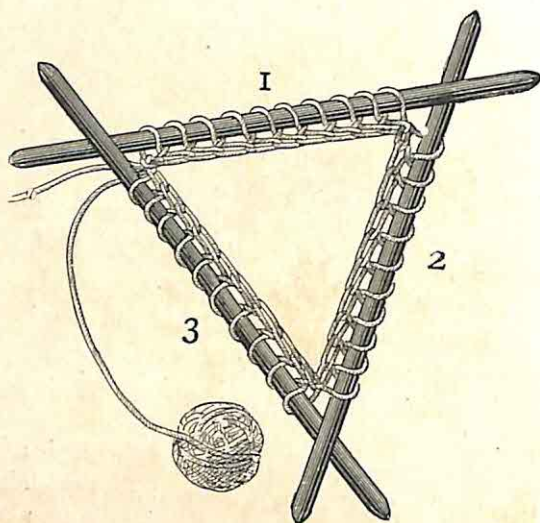


FIG. 148.

and point out that one round has been knitted. Examine children's knitting.

15. Draw children's attention to the loose piece of wool between the pins Nos. 1 and 3, and show them again how to draw No. 3 very close to No. 1, and knit off the double loops as single ones. Examine work.

16. Demonstrate round after round, until you are sure that most of the children have mastered the difficulties,

and can work alone, giving you time to help the slow and dull ones.

Notes.—1. It has been found a very good method to give the children a piece of knitting previously cast on, and a few rounds finished, before they learn how to cast on for themselves. By this plan they learn how to overcome the difficulties of (a) holding the work, and (b) preventing ladders.

2. The knitted garment, *e.g.* cuff, etc., must be ribbed, but the practice specimen may be plain knitting in two colours to show a join.

JOINING COTTON OR WOOL IN KNITTING

Class.—Girls.

Apparatus.—*For the Teacher.*—In the first lesson two knitting-pins, and two balls of wool of different colours, slate and chalks, a knitted garment showing joins.

For the Children.—In the first lesson two knitting-pins, and two balls of cotton or wool of different colours.

Method.—1. (a) Tell children they know how to join new cotton in needlework without knots, now they are going to learn how to join knitting cotton or wool, by a strong method, without knots; (b) tell them they will use two different colours, that they may see the effect of joining in this way.

2. Tell children to cast on with you ten loops on one pin, and then knit a few rows, in garter stitch.

3. (a) Let them begin a row simultaneously with you and knit off two loops; (b) show how to wind the wool round the left hand once, and carefully break it (if cotton it must be cut); (c) then show how to let the broken end fall behind the knitting, and place the work on the desk; (d) take the new ball and show children how to wind one

end of it round the first and second fingers of the left hand, then take up the knitting, and show very clearly and carefully how to draw up the broken end near its own loop, and hold it, with the wool coming from the new ball,

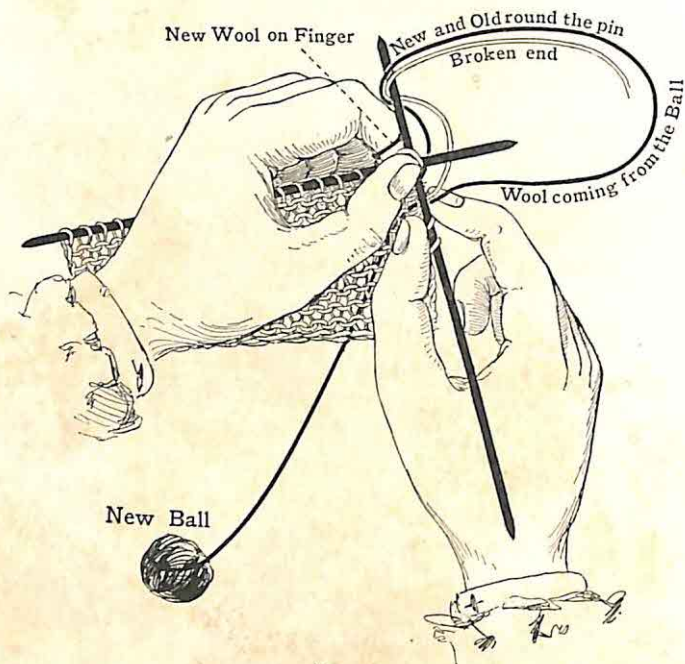


FIG. 149.

in the right hand, with the pin (Fig. 149) ready for knitting.

4. (a) Show children how to knit six loops with the double wool of two colours; (b) how to drop the broken end behind the right-hand pin; and (c) how to slip the wool off the first and second fingers of the left hand, and go on knitting with the wool from the ball.

5. (a) Let the children knit the next row with you ; (b) after knitting two loops off, show them how to knit the six double loops as single ones and then finish the row ; (c) let children knit a few rows in the second colour and then cast off.

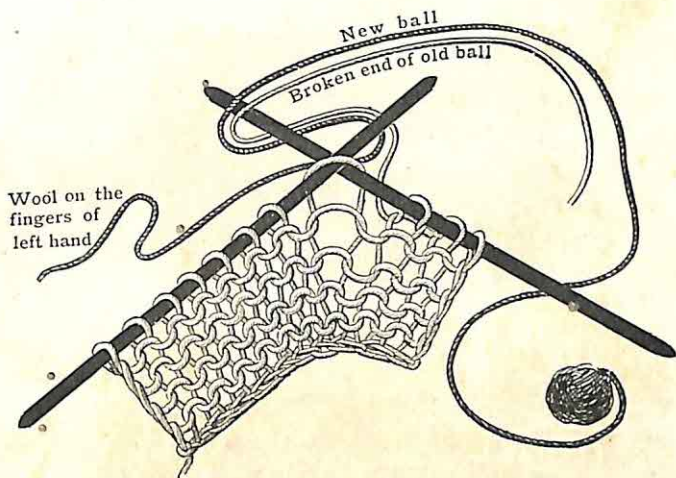


FIG. 150.

Slate Illustration.

6. Tell children the ends of cotton on the wrong side must be darned, by and by, into the material, and that when this is done the join is made very much stronger and neater on the wrong side.

7. Recapitulate the above method, while children are knitting a round specimen, and while knitting a cuff, muffatee, or sock.

8. Illustrate on the slate the appearance of round knitting in two colours, to show a join (Fig. 151).

9. In joining fine wool or cotton, an excellent and strong method is as follows:—thread a darning needle

with wool from the new ball, and weave the whole length of the darning needle through the middle of the wool attached to the knitting, beginning at the very end of it, draw the needle through, and break off the wool which is in the middle quite close to the old piece ; hold both the

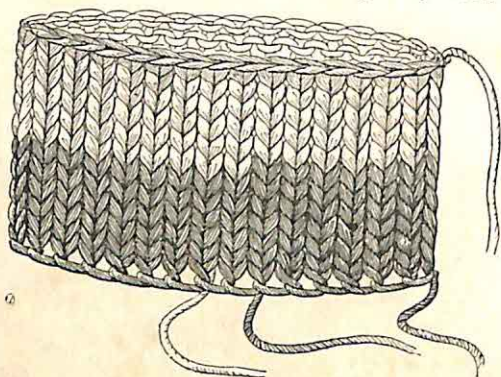


FIG. 151.

new and the old wool in the right and left hands, with the double wool in the centre, loosely, then twist it. Pull it to prove that the join is perfect. By this method there are no ends to darn in, and no double stitches to be considered.

CHAPTER V

CALF OF A STOCKING—DUTCH AND GUSSET HEELS

CALF OF STOCKING (DECREASINGS)

Class.—Girls.

Apparatus.—*For the Teacher.*—Two knitting needles, ball of wool, a finished stocking, slate and chalks.

For the Children.—Two knitting-pins, and a ball of wool or cotton.

Method.—1. (a) Explain that a stocking must fit the leg comfortably, and for this reason it is always made large enough at the beginning to go over the knee, and at the calf is gradually decreased, so that it may fit the ankle neatly and properly; (b) that it is better to learn how to decrease on a small specimen than on a stocking, which might be spoilt by mistakes.

2. (a) Recapitulate the method of making a slip-knot loop; and (b) tell children to cast on one needle fifteen loops, and knit four rows plain and purl alternately, slipping the first loop in every row except the first row, after the casting-on, and purling the eighth loop in the plain row, and knitting the same loop plain in the purl row, to form the seam stitch; (c) draw a simple illustration on the slate, making white chalk lines represent the vertical rows of the knitting.

3. The plain side of the knitting must be towards the worker when the decreasings are made. (a) Tell children to slip the first loop and knit three loops plain; (b) call their attention to three loops being left to the right of the seam, and that this is the place to begin the first decreasing; (c) explain that decreasings are sometimes called *narrows*, and sometimes *intakes*, and that these words mean (1) lessening the number of loops, (2) making this part of the stocking less in width, (3) taking the loops in towards the seam stitch.

4. (a) Colour these three loops to the right of the seam in the slate illustration (Fig. 152); (b) show children how to slip one loop, knit one, and then pull the slipped stitch over the knitted one; (c) elicit that this is like

casting-off, and that now instead of seven loops there are only six to the right of the seam ; (d) knit one plain and

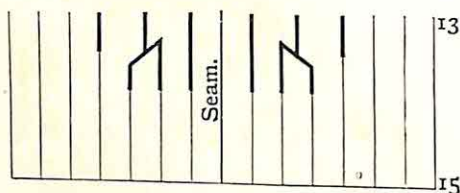


FIG. 152.

purl the seam stitch ; (e) show children again that one loop to the left of the seam stitch must be knitted before the second decreasing is made ; (f) colour three lines to

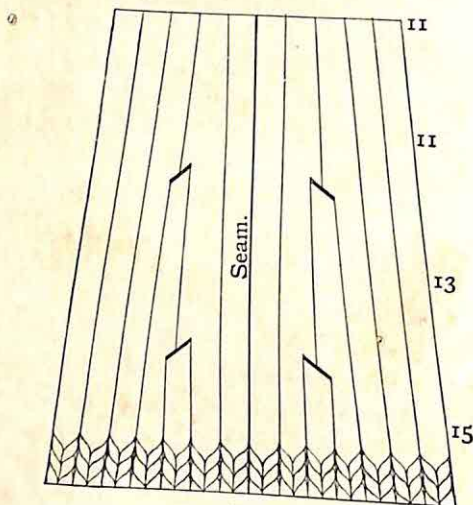


FIG. 153.

the left of the seam in the illustration (Fig. 152), and then show how to knit the next two loops together by putting the needle in the front part of both loops at the same

time; (*g*) point out the difference in the method of decreasing on the left side of the seam from the right side, and explain that this is done to make the decreasings fall *towards* the seam stitch, and so to match each other (for if the second were done like the first, it would fall away from the seam); (*h*) explain why a loop is knitted between each decreasing and the seam stitch, viz. to prevent the seam stitch from being pulled out of shape by the heavy double loop, which forms the decreas-

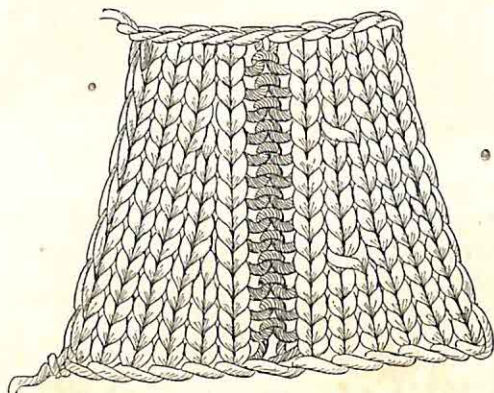


FIG. 154.

ing: examine children's work; (*i*) illustrate the appearance of the first pair of decreasings (Fig. 152); (*j*) tell children to finish this row of knitting, and then knit five rows purl and plain alternately: examine work; (*k*) illustrate five rows knitted in white chalk, and colour three lines on either side of the seam; (*l*) recapitulate the whole of the method, eliciting, illustrating, questioning, and examining as above, while making the second pair of decreasings; (*m*) explain that the number of rows left between each pair of decreasings for the calf may be at first nine, seven,

or five, and then three; (*n*) that the decreasings are always knitted in pairs, and on the right or plain side of the knitting; (*o*) illustrate the second pair of decreasings, and elicit that there are eleven loops left; (*p*) tell children to knit five rows purl and plain alternately, and cast off.

5. Illustrate by a simple diagram the appearance of the specimen when finished (Figs. 153 or 154).

Note.—The average number of decreasings in long stockings is eight, and in socks four.

A. THE DUTCH HEEL

Class.—Older Girls and Pupil Teachers.

Apparatus.—*For the Teacher.*—Two knitting-pins, No. 12, and a ball of five-ply Scotch fingering, slate and chalks, a finished stocking or sock with Dutch heel.

For the Class.—Two knitting-pins, Nos. 14 or 15, and a ball of three- or four-ply Scotch fingering, or knitting cotton.

Method.—1. (*a*) Let the girls cast on with you twenty-five loops on one pin, then tell them to knit and purl alternate rows, making the thirteenth stitch the seam, and always slipping the first loop in every row; (*b*) when the girls have knitted twenty-four rows (finishing with a knitting row), *i.e.* a square, having twelve slip stitches up the sides, then show them collectively how to turn the heel; (*c*) explain that heels of stockings and socks vary in length (a good rule is that the heel, when doubled, is half a square in its length). Heels of stockings and socks for adults vary in length from two to three inches; (*d*) illustrate on the slate. Examine girls' work.

2. *Turning the Heel.*—The class works all together with you as follows: (*a*) Slip one, purl to the seam, knit the

seam, purl three, purl two together, thus leaving seven not purled, turn; (b) slip one, knit three plain, purl the seam, knit three, slip the fourth, knit one of the eight side stitches, pulling the slipped stitch over the knitted one, thus leaving seven not knitted; (c) illustrate on the slate, explaining that the decreasings of the heel are made alternately on the wrong and right sides of the knitting, and always to the left of the seam, and that they fall *away* from the seam. Elicit that this differs from the calf, the decreasings of which are made on the right side to the right and left of the seam stitch, and fall *towards* the seam; (d) turn, slip one, purl three, knit the seam, purl three, purl the fourth and one of the seven side stitches together; (e) illustrate on slate, showing that this decreasing is made on the purl side of the knitting, to the left of the seam, and that by purling two together, this decreasing matches the first one made on the plain side of the knitting, in that it falls *away* from the seam; examine girls' work; (f) turn, slip one, knit three, purl the seam (then call the attention of class to the fact that one row of knitting is always made between every heel-decreasing), knit three, slip the fourth, and knit the first of the seven side stitches, pulling the slipped stitch over the knitted, and again calling upon the class to notice that one row of knitting lies between the first decreasing and this one; (g) illustrate on slate, and elicit that the decreasings in the heel are made alternately on the plain and purl side of the knitting, always to the left of the seam, and always with one row of plain or purl between each. Examine work.

Repeat the above method, till all the stitches on either side of the nine are drawn in by the decreasings, eliciting that the decreasings in the calf are always done on the right

side of the knitting, two in a row; the decreasings in the heel one in a row, and alternately on the right and wrong sides.

3. (a) Show girls how to take up the twelve slip stitches at the side of the heel, by putting the knitting-pin through the inner half of the loop, *i.e.* the part of the loop lying on the purl stitches, and then drawing the wool through as in plain knitting to form a loop; (b)

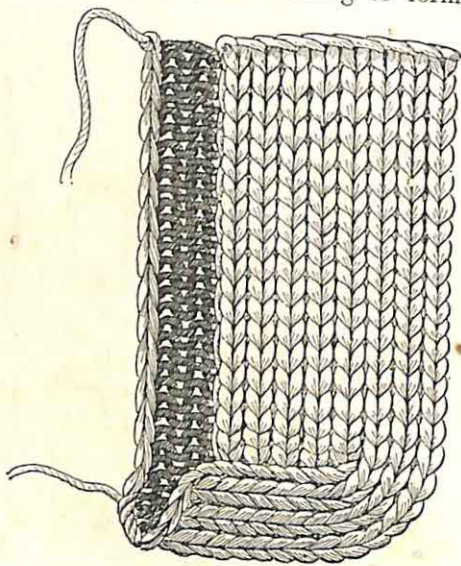


FIG. 155.

when all twelve loops are taken up, examine the girls' work, and tell them to purl all the stitches, till they reach the other side with the twelve slip stitches, then show them how to take these up, by putting the knitting-pin in the middle of each slip loop from right to left and purling them on to the pin; (c) tell girls to turn knitting round to the right side, and cast off very loosely; (d) (Fig. 155) gives the appearance of Dutch heel when finished.

- A.B.*—1. In turning the heel, some people knit and purl the first loop in every turn, instead of slipping. Both methods differ in appearance; slipping the first loop forms a row of chain stitches, while knitting and purling form a row of hard knotted stitches, with holes between.
2. The Dutch heel fits better and wears longer than the gusset.
 3. The knitting-pins must differ in size, not only because of the size of the wool, but to suit tight and loose knitters. Tight knitters must use one size coarser pins than loose knitters of the same ply wool, or cotton.
 4. Illustrate on the slate by vertical lines as for the calf.

B. THE GUSSET HEEL

Method.—1. Discontinue the seam stitch. Slip the first stitch at every turn. Let the class work with you.

2. *Turning the Heel.*—Compare these two specimens of heels, and point out that the Dutch is hood-like and rounded in shape, while the gusset is triangular, being pointed at the beginning and increasing in width, till all the decreasings are ended, and till the same number is on the pin, as those first purled. (In this size heel the number will be fourteen.) (*a*) Purl fourteen, purl two together, purl one, turn; (*b*) illustrate and examine girls' work; (*c*) knit five, slip one, knit one, pull the slipped stitch over the knitted, knit one, turn; (*d*) illustrate, examine, and explain that one row is knitted between each decreasing, and that each decreasing falls away from the seam, and is made to the left of it, as in the Dutch heel, but that one stitch is always added after every decreasing, before turning; (*e*) purl six, purl two together, purl one, turn; (*f*) illustrate, examine, and question; (*g*) knit seven, slip one, knit one, pull the slipped stitch over knitted one, knit one, turn; (*h*) illustrate, examine, and question after every successive decreasing; (*i*) purl eight, purl two together, purl one, turn; (*j*) knit nine, slip one, knit one,

pull the slipped stitch over, knit one, turn ; (*k*) purl ten, purl two together, purl one, turn ; (*l*) knit eleven, slip one, knit one, pull slipped stitch over, knit one, turn ; (*m*) purl twelve, purl two together, purl one, turn ; (*n*) knit thirteen, slip one, knit one, and pull the slipped stitch over, knit one, turn ; (*o*) purl fourteen, purl two together, turn, and cast off very loosely ; (*p*) illustrate the heel when completed.

N.B.—The above lesson would be given, after the proper length of the heel has been knitted. The number of stitches cast on would be the same as for the Dutch heel.

CHAPTER VI

THICKENED HEEL OF STOCKING OR SOCK—DECREASING THE TOE

HEEL AND GUSSET OF STOCKING OR SOCK

Class.—Older Scholars, Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—A piece of coarse knitting (already prepared), slate and chalks, a finished stocking or sock.

For the Class.—A piece of prepared knitting of coarse cotton, or wool, and four knitting needles.

Method.—1. (a) Ask girls to tell you the number of stitches they have previously cast on each needle, $12 + 12 + 13 = 37$; (b) show them a stocking or sock, and tell them they are going to learn how to divide for a heel, and then learn how to pick up the gusset, so as to go on knitting the foot.

(N.B.—The heel may be the Dutch or Gusset, and may be thickened or single.)

(c) Let girls knit a round with you, and when they reach the needle with seam stitch, elicit that this is called the *heel* needle, tell them to knit this with you, and then divide thirty-seven into two parts, viz. eighteen and nineteen; (d) explain that nineteen stitches must be placed on the heel needle, so that three stitches must be added, at either end of this needle, from the other two; (e) with the fourth needle knit off three loops from No. 2 needle, considering the heel needle No. 1, and show girls how to slip these three loops on to the heel needle; (f) tell girls to turn work and purl nine stitches to the seam, knit seam, and then purl six; (g) show girls how to purl three loops off from No. 3 needle; (h) let them count to see that there are nineteen stitches on the heel needle, and nine stitches on each of the other two needles, which must now be called the *instep* needles; examine their work.

2. The Thickened Heel.

First Method.—(a) Tell girls to knit one row of heel plain, slipping first stitch; (b) then work with them thus:—Slip the first stitch in the purl row, purl one, slip one, alternately up to seam, knit the seam, slip one, purl one to the end of row, being careful that the last stitch is always purled and not slipped; (c) knit the second row plain; (d) in the third row slip one, purl two, then slip one, purl one, up to seam, knit

the seam, slip one, purl one to the end, the last two stitches in this row will be purled; (e) knit the fourth row plain and repeat *b* and *d* alternately, with a plain row between, till the heel is long enough, say 2 or 2½ inches, or ten slip stitches up the sides, then recapitulate the former lesson for turning the heel, discontinuing the thickening, where the decreasings occur.

N.B.—Explain that thickening in this way has the effect of contracting knitting, so that it must be done as loosely as possible. Some people use coarse needles for the heel to prevent contraction.

3. *Another Method of Thickening.*—Put an even number on the heel needle, hold plain side of knitting towards you, and tell girls to work with you thus:—(a) Slip the first stitch plain, knit the second plain, putting the cotton twice round the needle, instead of once, before bringing it through the loop; (b) bring the cotton in front of the needles as for purling, and slip the next stitch plainwise, and pass the cotton back again, knit the next stitch plain, putting the cotton twice round the needle as before, and so on to the end of the needle, always purling the last stitch for the sake of having slip stitches up the sides; (c) turn the work round, slip the first stitch always, in beginning every row, till heel is the right length, and knit those stitches that were slipped, always putting cotton twice round the needle, and slip those stitches that are double on the needle, *always* bringing the cotton in front of the right-hand needle first, and passing it behind the slipped stitch.

- N.B.*—1. This kind of thickening is really double knitting, and both sides of the heel are alike.
2. There is no seam stitch kept, and the thickening is best taught as a separate lesson, on a piece of straight coarse woollen knitting.
3. This double knitting stitch is most useful for comforters, coverlets, shawls, and muffatees, as well as for the heels and toes of stockings.

4. The thickening must be discontinued, when the heel is being turned, and the two centre stitches can be made into one for the seam. The double stitches of this method prevent the contracting of the knitting.

4. *Picking up the Gusset.*—(a) Recapitulate the method of *knitting up* the slip stitches down one side of the heel, and call this needle No. 1, then show girls how to put the eighteen stitches for the instep on one

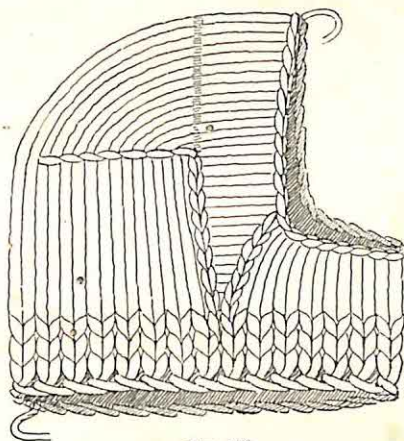


FIG. 156.

needle, and knit these off on to another needle, and call it No. 2; (b) show again how to take up the slip stitches of the second side of heel, and take off five stitches from No. 1 needle on to No. 3, one of these being the original seam stitch. Keep this stitch to mark the centre of sole of foot, and end of round; (c) let girls

count stitches with you, and elicit how many extra stitches there are in addition to those first cast on (in the above case there will be ten extra); (d) tell girls to knit with you one round, ending at the original seam stitch; (e) then to knit off the stitches on No. 1 needle, except the last three; then tell them to knit two together, knit one; (f) knit the instep needle plain; (g) then knit one off No. 3 needle, and slip one, knit one, and pull the slipped stitch over the knitted one, knit to end of needle; (h) then knit two complete rounds, and decrease on No. 1 and No. 3 needles as above.

- N.B.*—1. The decreasings for the foot must be on the *heel sides*, with two rows between.
2. Decrease till there are thirty-seven stitches on the three needles, eighteen on the instep, nine on No. 1 needle, and ten on No. 3. This forms the gusset of the instep, and this gusset should never be too short, or the foot will be a poor shape, and will not fit comfortably.
3. For this size, five decreasings on each heel needle will be required.
4. The girls should be allowed to cast off, when the decreasings are finished, or the number of stitches is thirty-seven altogether.

DECREASING THE TOE

Method of Decreasing the Toe.—Narrow at both ends of the needles, on either side of the toe, with three rounds between, *twice*; then with two rows between, *twice*; then with one row between, *twice*; and then every round, till there are 6, 8, 10, 12, 14, or 16 stitches left on each of the two needles. Graft these loops together with needle and the same size wool, cotton, or silk; or cast off by knitting the loops together, in the ordinary way.

Another Method.—Divide for the toe, putting half the stitches on the instep needle, and the other half equally on the two back or heel needles. For the first round narrow at the beginning of each needle (by slip one, knit one, and pull the slipped stitch over); for the next round narrow at the end of each needle only (by knitting two stitches together), again at the beginning only, and so on, till as many stitches are left as will make a round comfortable toe.

N.B.—The beginning and end of the needles mean at either side of the toe and not in the middle of the back of the stocking. Always leave a knitted loop before and after each decreasing in both methods of reducing the toe. If any portions of stockings or socks are measured by inches, find out how many rows the wool, cotton, or silk will knit to the inch, width way.

CHAPTER VII

TAKING UP A LADDER, OR DROPPED STITCHES IN A
KNITTED GARMENT

Method.—(a) Put your hand into the stocking and hold the ladder or dropped stitches over the forefinger of your left hand, with the loops towards you; (b) take the head of a pin or crochet hook, and put it away from you under the loops to the right, and then under the ladder of cotton or wool and quite through it, without splitting or breaking the ladder or the dropped loop; (c) draw the ladder through the loop, and go on taking up the other dropped stitches in the same way, and darn over the weak place, and graft the loose loops, on the wrong side.

N.B.—This is a simple method of taking up dropped loops, when the garment is finished.

TAKING UP DROPPED STITCHES AND LADDERS WHILE
KNITTING (Fig. 157)

Class.—Advanced Infants and Girls.

Apparatus.—*For Teacher.*—Knitted strip in coarse cotton, or wool; slate and chalks; a garment or strip in which loops have been successfully taken up.

For Children.—A strip in process of knitting.

Previous Knowledge.—Children know how to knit garter stitch, and know the difference between *purl* and *plain knitting*.

Aim of the Lesson.—(a) To teach children to be careful, because slipped stitches are often the result of

carelessness and inattention (sometimes they are accidentally dropped); (*b*) to impress upon children that a new knitted garment must be as *sound* and as perfect as possible; (*c*) to train the powers of *comparison* and *observation*.

PLAN OF THE LESSON

1. To knit all together with teacher 4 loops.
2. To slip simultaneously 2 loops.
3. To make *two ladders*.
4. To compare ladders.
5. To pick up two loops on right-hand needle.
6. To make ladders into loops.
7. Explain that first ladder falls below the second one, and is taken up last.

Method.—*Introduction.*—(*a*) Show children a child's strip, in which two loops have been carelessly dropped; (*b*) compare with a sound strip, and point out that dropped loops, even when the ladders are unbroken, form a hole.

Preparation.—(*a*) Let children knit with you 4 loops, counting them aloud and simultaneously; (*b*) show them how to slip 2 loops; (*c*) then how to get the two ladders by drawing out the cotton from the loops with the right-hand needle *towards* them, and repeating this process, how to draw out the second ladder *away* from them; examine; (*d*) make use of a large diagram on slate to make this clear, as well as by a large specimen in your own hands.

Blackboard Illustration.—Draw diagram of the knitting in presence of class, attracting attention to the *ladders* and slipped loops.

Compare the Ladders.—(*a*) Explain that the first ladder,

which children drew towards them, and which falls in front of the knitting, came out of the *purl* loops; (b) and that the second ladder was drawn out at the back of loops, and belongs to the plain knitting (*cp.* *purl* and *plain*).

Blackboard Illustrations.—Draw a rough sketch on the slate of the two kinds of ladders.

Picking up the Loops.—Show by your own large

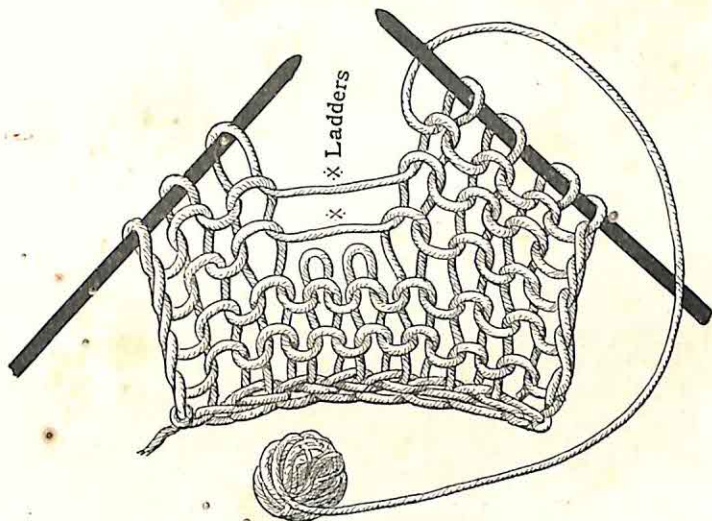


FIG. 157.

specimen how to put the right-hand needle through the front part of the loops. Let children do this. Examine, and while examining make children answer questions on kinds of knitted loops and ladders.

Taking up Ladders and making them Loops again.—(a) Put left-hand needle under the *back* ladder from the front, then put this needle through the *back* of the first loop on right-hand needle, and lift the loop over the ladder to the

left, and draw ladder through *towards* you, neither too tight nor too loose. Demonstrate this more than once, and go in and out among children, and show the ladder coming through the loop; (b) slip ladder and loop off left-hand needle, and then put it on left-hand needle from the back of loop; (c) examine, question, and explain again.

(d) Show once more how to lift up ladder on left-hand needle, and repeat the process of making it into a loop; (e) explain that now ladder has been made into two loops, it is lifted higher up—viz. *one row*. Children ought to be able to tell you this. Examine closely to see that loops are not twisted, and are unsplit, and look like *plain knitting*; (f) slip off first loop on left-hand needle to right-hand one, and lift up ladder from the front, and put loop on right-hand needle over ladder from left to right, and draw it out at the back away from you. Show children distinctly how to do this, going nearer to individuals in order to do so; (g) repeat this process with second loop; (h) examine, and question, and explain that these loops are *purled* now; (i) show how to place them on left-hand needle, and go on knitting plain.

- N.B.—1. The perfection of taking up ladders is to make loops equal in size.
2. Illustrate loops fully taken up.
 3. Let children knit another row, to test the size of the loops taken up.
 4. The knitting in teacher's hands, being on a large scale, will be used constantly to illustrate what teacher tells class to do.
 5. The diagrams on the slate can only be a few rough-and-ready ones, to make the chief points of lesson clearer.
 6. Illustrate the finished appearance, either on slate or by a large knitted specimen in your hand.

CHAPTER VIII

RULES AND SCALES FOR STOCKINGS AND SOCKS

GENERAL RULES FOR STOCKINGS (Fig. 158)

SCALES for different sized knitted stockings and socks are exceedingly difficult to make, because so much depends upon the size of the wool, cotton, or silk, and upon the knitter. The following rules are very simple, and can easily be remembered:—

1. Find the exact size of the stocking round the leg above the knee.

2. The stocking must be as long as it is wide from above the knee to the bend of it, *i.e.* the length = one square.

N.B.—The rib or welt must be from 2 to 3 inches long. The rib gives elasticity to the tops, and so keeps them from rolling down. It is always an additional length to stockings and socks.

3. From the bend of the knee to the beginning of the calf = one square.

N.B.—Longer for tall people, and so all through the stocking.

4. From the beginning to the end of the calf = one square.

N.B.—This square contains the leg reductions or decreasings, which are made all on one needle, one on either side of the

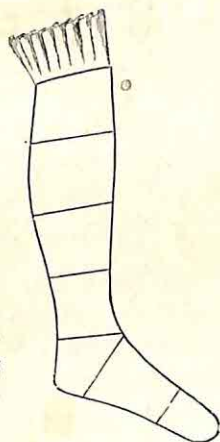


FIG. 158.

seam stitch. A full-sized stocking should be reduced $\frac{2}{3}$ of the whole number of stitches on the needles. The leg reductions in children's stockings should be about $\frac{1}{4}$ of the whole number of stitches. Socks are very seldom decreased, but some people consider they fit the calf better for a few reductions, the number of which in men's and boys' socks should not exceed four double decreasings altogether. The leg reductions for a slim ankle are sometimes $\frac{1}{3}$ of the whole number of stitches. The slope of the leg must be gradual, so that if five rows are left between each of the first decreasings, seven rows must be left between the last two or three leg reductions. Another good rule for deciding the number of rows between each narrowing is to divide the number of stitches contained on the three needles by *half* the number on one, and keep to the result. For example, if 61 stitches are cast on, 20 on each needle + 1 for the seam, divide 60 by 10 = 6. According to this rule six rows would be left between each leg reduction.

5. For the small of the leg or ankle, knit one square, *i.e.* breadth = length.
6. For the heel before turning it, knit one square, *i.e.* when doubled, the heel in breadth is half its own length.
7. The instep decreasings = $\frac{1}{4}$ of a square.
8. The foot is the same width as the ankle, after the instep decreasings. The foot from the heel to the first decreasing for the toe must be $1\frac{1}{2}$ squares, or the length must equal the width at the top of the stocking.
9. The decreasings = $\frac{1}{4}$ of a square.

N.B.—The square always means the breadth of the stocking at the time the next square is begun.

SCALE OF PROPORTIONS FOR STOCKINGS

MATERIALS.—4-ply Fingering, or Winter Merino, or Angola Wool. NEEDLES.—Nos. 14, 15, or 16, according to the knitter.		4 years of age.	6 years.	9 years.	12 years.	14 years.	16 years.	Woman's.	Man's.
1. Number of stitches on each needle	}	16	18	20	25	28	32	35	36
2. Total number of stitches, including the seam stitch	}	49	55	61	76	85	96	106	109
3. The rib or welt	}	2 in.	2 in.	2 in.	2 in.	3 in.	3 in.	3 in.	3 in.
4. Plain rows, or two squares <i>N.B.</i> —Longer if necessary.	}	49	55	61	76	85	96	106	109
5. Number of double narrowings	}	6	7	7	9	12	13	14	14
6. Total number of stitches, after the decreasing	}	37	41	47	58	61	70	78	81
7. Number of rows to the heel	One square, or more if necessary.								
8. Number of stitches on one needle for the heel	}	19	21	23	29	31	35	39	41
9. Number of stitches on the instep needles	}	18	20	24	29	30	35	39	40
10. Size of the heel	The same number of rows as stitches on the needle.								
11. Number of stitches after the heel is turned. <i>Dutch</i>	}	9	9	9	9	9	9	9	11
12. Number of slip stitches on each side of the heel	}	9	10	11	14	15	17	19	20
13. Number of stitches, after decreasing with one row between	}	37	41	47	58	61	70	78	81
14. Length of foot from first gusset decreasing of the heel to the first decreasing for the toe	One and a half squares, or the width of the top of the stocking, when doubled.								
15. Number of stitches on each of the two needles for the toe <i>N.B.</i> —The seam stitch is decreased after the turning of the heel.	}	18	20	23	29	30	35	39	40
16. Number of stitches to be cast off each of the two toe needles	}	6	8	8	10	10	11	12	14

N.B.—The scale is for coarse materials.

SOCKS (Fig. 159)

The rules for socks are somewhat the same as for stockings, except that the knitter begins the sock, after the welt, two squares shorter than a long stocking, and the leg reductions are made towards the end of the first square in socks, and are fewer in number than in stockings. In thickening the toes and heels of socks and stockings use a finer wool or cotton of the same colour, or, if knitting fine woollen socks and stockings, knit in with the wool knitting silk of the same colour. Silk is very durable, washes well, and thickens quite enough.

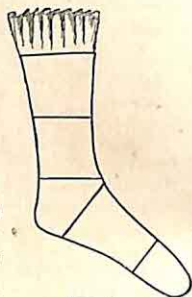


FIG. 159.

SCALE FOR SOCKS

	Child's Merino or Andalusian.	Boy's 4-ply Scotch.	Boy's 4-ply Scotch.	Men's 4-ply Scotch.
1. Number of stitches on each needle .	20	24	28	32
2. Total, including seam stitch .	61	73	84	96
3. Rib or welt	2 inches	3 inches	3 inches	3 inches
4. Plain or ribbed rows	2 "	2½ "	2½ "	3 "
<i>N.B.</i> —Longer if necessary.				
5. Leg reductions, <i>i.e.</i> double decreases {	2, with 4 rows between	3, with 6 rows between	4, with 6 rows between	4, with 6 rows between
6. Total of stitches for ankle	57	67	76	88
7. Plain or ribbed rows to the heel . .	about 2 inches	3 inches	3 inches	3 inches
8. Number of stitches on the heel needle .	29	33	39	43
9. Size of the heel	The same number of rows as stitches on the needle.			
	<i>N.B.</i> —See Nos. 11, 12, 13, on page 297.			
10. Length of foot from the first gusset decreasing of the heel to the first toe decreasing	The same as the length of the ankle + the length of the leg reductions in the calf.			
11. Reduce the toe, till the number of stitches left on the two needles are . . .	10	10	12	14

CHAPTER IX

VEST—PETTICOAT—SLEEVELESS BODICE—INFANT'S JACKET

A WOMAN'S KNITTED VEST

Materials.—Angora, Merino, Vest Wool, Lamb's Wool, and two coarse steel needles, or two fine bone or wood pins.

Method.—1. Cast on seventy-two stitches on one pin.

2. Rib in two plain and two purl for half a yard.

3. Knit seven squares of four plain and four purl for four rows, and then four purl and four plain for four rows.

4. Knit off sixteen stitches at the right-hand side of the vest, then cast off loosely forty-one stitches, which will now form a half of the neck.

5. Knit the sixteen stitches on the left-hand side in ten squares of four plain and four purl for the shoulder strap, and then slip these sixteen stitches off on to another needle, or a coarse piece of twine to prevent them from slipping down, break off the wool, and leave the broken end on the outside part of the shoulder strap.

6. Put the needle into the first *inside* loop of the sixteen stitches for the opposite shoulder strap, and place the wool from the ball round the point of the needle, which is in the loop, and draw the end down about 4 inches to form a long double loop, then pull the single stitch on the right-hand needle through the loop, and proceed to knit off the other fifteen stitches with double wool in ten squares of four plain four purl to correspond with the shoulder strap.

N.B.—Drop the short end of wool, when beginning the second row of this strap, and be careful to knit off the double loops as single ones.

7. Finish the shoulder strap by knitting the last stitch inside, *i.e.* at the commencement of the neck.

8. Turn the garment round, and put the needle into the last stitch knitted, and cast on forty stitches for the other half of the neck.

9. Knit the sixteen stitches of the other shoulder strap on to this needle in the proper squares.

10. Turn and knit the second set of seven bust squares, being very careful to knit in with the other wool, the broken end (which was previously left outside the strap) for four squares.

11. When the seven bust squares are completed, knit another half yard in ribs of two plain and two purl for the remainder of the body, and then cast off loosely.

12. Join the sides of the garment by seaming as far up from the bottom edges as the third bust square. This makes the armhole about 5 inches long, and as this kind of knitting stretches very much, this length will be ample for comfort as well as warmth.

13. Add a deep crochet or knitted border to the armholes and neck, including the shoulder straps.

14. Make a crochet or knitted chain of double wool to form a string, which must be run through the edging on the neck, before the chain is finished off by knotted tassels.

15. Make a similar chain string for each sleeve, and tie the strings on the top of the shoulders in bows, before finishing off the ends by knotted tassels.

N.B. — 1. This garment can be easily knitted by young children.

2. If the vest is made in two halves, two children could make the garment between them. But this would compel the knitters to make each of the shoulder straps five squares long, and then cast off. The straps must be afterwards joined together by seaming at the top of the shoulders. This method is not so neat or so strong as the first one given.
3. Brioche stitch could be used instead of the ribbing.

A CHILD'S KNITTED PETTICOT

Materials.—4-ply Scotch Fingering, Petticoat Yarn, double Berlin, or Fleecy wool. Needles to match the wool in size.

Method.—1. Cast on one hundred and eighty stitches.

2. *First Row.*—Knit plain.

3. *Second Row.*—* Bring the wool in front of the needle, as if for purling, and slip the first stitch as if for plain knitting, knit one plain *, and repeat from * to * throughout the row.

4. *Third Row.*—* Bring the wool in front of the needle and slip one as if for plain knitting, knit the double stitch together *. Repeat from * to * throughout this and every succeeding row, till the petticoat is wide enough, then knit a plain row and cast off.

5. Sew up the petticoat, leaving about 6 inches for the placket hole.

6. Trim the edge of the garment by a simple crochet pattern, or a knitted lace edging (No. 2 pattern).

7. Put on a good strong calico, or gray Silesia band the length required for the child's waist.

A PENELOPE, OR KNITTED SLEEVELESS BODICE

Materials.—4-ply Scotch fingering and No. 15 needles. Gray, cardinal, or black are very useful colours.

Method.—1. Cast on forty-eight stitches for a woman's medium size, and less or more for a slim or stout figure.

2. Knit as for a scarf, garter-stitch, three hundred and eighty rows with chain edge, and then cast off.

N.B.—More or less rows.

3. Put the casting-on and the casting-off ends together, and join by seaming very neatly and closely with darning needle, and the same size and coloured wool.

4. When the ends are joined, divide the whole length of the knitting in half, and mark by a pin; place the joined ends on this half, and divide the knitting on either side of the join into halves for the armholes.

N.B.—For the above size, fifty rows on either side of the join will be suitable.

5. Sew the chain edges of the knitting together on the same side as the other join was made (and this must now be considered the wrong side of the garment), and in the same way as the first join was made. The armholes will be at each end of the folded knitting, and the join will be half of the folded knitting, and the armholes will be one-fourth of the folded length on either side of the join.

6. Trim the armholes by a crochet edging, or by adding a knitted lace edging.

7. Decide upon which side shall be the neck of the garment, and trim it, as well as the front openings, with edging to match the trimmings on the sleeves (Lace Edging, No. 2).

8. Sew on three buttons and three knitted, or elastic,

loops to fasten the garment across the chest, and it is finished.

Use.—This garment is worn over the dress, under loose mantles and cloaks, and may take the place of a shawl as a wrap in cold weather. As it is close-fitting, it is exceedingly useful and comfortable.

Class.—Children in Infants' Schools could make this garment quite easily. The sewing together, trimming, and fastening on of buttons and loops must be done by the teacher, or older scholars. It is a very inexpensive article, and is certain of a ready sale in schools.

N.B.—Sleeves can be made of a straight piece of knitting in garter stitch, with chain edges, then sewn together at the edges and sewn into the armholes. The cuffs should be trimmed to match the neck and bust of the garment.

INFANT'S KNITTED JACKET

Materials.— $2\frac{1}{2}$ ounces of Merino Wool, bone pins No. 12, $2\frac{1}{2}$ yards of narrow ribbon.

Method.—1. Cast on seventy-two stitches and knit two plain and two purl alternately for ten rows.

2. Knit one row with wool before the needle, and take two together.

3. Knit one row plain.

4. Knit three plain and three purl for three rows, and continue changing this, until there are twenty squares.

5. Knit twenty-four stitches, and put them on a safety pin, then cast off twenty-four*.

6. Continue knitting the remaining twenty-four as before, until you have nine squares, then cast on fifteen stitches, and knit until there are twenty squares.

7. Knit one row plain and one row with wool before the needle, and take two together, and ten rows two plain and two purl, and cast off*.

8. Take up the twenty-four stitches from the safety pin, and knit from * to *.

9. *Sleeves*.—Cast on forty-eight stitches, and knit ten rows two plain and two purl, one row with wool before the needle, and take two together, and one row plain, then knit twenty squares, and cast off loosely.

N.B.—The sleeves are made separate from the body of the jacket.

10. *Collar*.—Take up round the neck as many stitches as you can, and knit one plain row, then one row with wool before the needle and two together, and then ten rows two plain and two purl, and cast off.

11. Sew in sleeves, and run the ribbon through the holes.

CHAPTER X

BABIES' HOODS—BOY'S FISHER CAP

BABY'S HOOD (No. 1)

Materials.—White double Berlin, or 4-ply Fleecy Wool. Needles, No. 10 or No. 12.

Method.—(a) Cast on fifty stitches; (b) knit eighty plain rows with chain edge; (c) cast off the fifty stitches very loosely; (d) fold the strip of knitting in half its length, so that the casting-on and casting-off edges are quite equally divided into two parts; (e) sew together three inches of the casting-on edges from the casting-on cotton, towards the folded top of the knitting, and then draw all the remaining portion of the casting-on stitches

together to form the crown ; (f) roll back sixty rows of the knitting from the casting-off edge to form the front ; (g) cast on fifty stitches by the chain edges, on either side of the centre of the crown, to form a hood ; (h) knit forty plain rows ; (i) cast off very loosely ; (j) trim the edges of this curtain by a crochet, or knitted, edging ; (k) line the hood with white silk Sarcenet, or fine cream-coloured flannel, or jaconet muslin ; (l) sew white silk strings on either side of the front on to the inside lining ; (m) knit or crochet a cord in double chain, and sew it to each corner of the rolled-back front, and tie these cords at the back, below the crown, in a bow, and finish off the cord by tassels.

N.B.—The join in the crown must be considered the wrong side of the hood, and the stitches which are cast on for the curtain must be taken up on the right side of the hood.

Class.—The knitting, which is only garter stitch, can be done by Infants ; but the sewing up of the crown, and the casting on for the curtain to form the hood, must be done by the teacher, or older girls.

ANOTHER BABY'S HOOD

Method.—(a) Cast on eighty stitches for the border, and knit plain and purl alternately, beginning every row with the plain stitch, and decrease one stitch at each end of every other row, till you have knit ten rows ; (b) next begin the headpiece, and knit six rows in double knitting, then one row of holes, eight rows of double knitting, one of holes, and six rows of double knitting, then begin to knit in honeycomb stitch, cast off two stitches at the end of each pin, every row, until there are but twenty-four on the pin, then cast off ; (c) for the crown, cast on

five stitches, and increase each row till you have sixteen loops, then knit twelve rows. Narrow at each end for two rows, knit fourteen rows and cast off. Sew the crown to the headpiece with wool of the same quality; (*d*) begin the curtain by taking up all the stitches at the back and knitting six rows in double knitting, increasing four stitches on each pin; then one row of holes, increasing two stitches; then six rows of double knitting, still increasing, then one row of holes, increasing two stitches and then double knitting, increasing till there are one hundred and fifty stitches on the pin, and then cast off, and put in ribbons through the holes, where they are wanted.

BOY'S FISHER CAP

Materials.—Ordinary fingering and No. 13 needles.

Method.—(*a*) Measure the size round the head of several children and strike the average, then make an allowance for the elasticity of knitted woollen garments; (*b*) find out how many vertical rows the wool will knit to the inch, and then calculate the number of stitches to be cast on; (*c*) with 3-ply speckled fingering, or dark navy blue, cast on forty stitches, and knit a welt of two plain and two purl for two inches in length; (*d*) then knit plain and purl alternately, to give a right and a wrong side to the cap, for seven inches, and then decrease at the beginning and end of the row, for every alternate row, till twenty or less stitches are left, and cast off.

N.B.—Slip the first stitch in every row for chain edge, and decrease after the first, and before the last stitches in a row.

(*e*) Knit two more strips like the first, and then seam the edges together on the wrong side. (*f*) Though each strip

has been decreased to make the top of the cap smaller, it must be made smaller still by being drawn together and seamed at the top edges. (g) Finish off the top by a cord and tassel; (h) the welt, which makes the cap fit more closely, must be turned back to form a border.

Class.—When knitted in strips and decreased, the cap can be knitted by children in lower classes of Girls' School.

N.B.—The cap can be made all in one, by casting on one hundred and fourteen stitches on three needles, and decreasing towards the top, as for the toe of a stocking. Sew the top edges together on the wrong side, and finish off by a button, or a cord and tassel. These caps are very useful and saleable.

CHAPTER XI

COMFORTERS OR SCARVES—MUFFATEES

COMFORTER (No. 1)

Materials.—Fleecy wool, lamb's wool, double Berlin, Scotch fingering, and two bone or wood needles to match the size of wool.

Method.—1. Cast on sixty-one stitches (more or less, according to the size of the wool and to liking).

2. Knit the sixty-one stitches off in plain knitting.

3. *First Row.*—Slip one, * make one, knit one, make one, knit one, and repeat from * to the end of the row.

4. *Second Row.*—Slip one, * knit two together, and repeat from * to the end of the row.

5. The third row is like the first, and the fourth row is like the second, till the comforter is long enough.

N.B.—The length varies from $1\frac{1}{2}$ to 2 yards.

6. Finish off the ends by a knitted fringe, or by knotted tassels, when the casting-on and casting-off stitches have each been drawn together.

COMFORTER (No. 2) (*Raised Stitch*)

Method.—1. Cast on an even number of stitches, and knit them off on to the second needle (forty, fifty, or sixty stitches will be suitable numbers for wool).

2. * Make one, knit two together to the end of the row.

3. The next row is purled.

4. Next is plain, the next is purled, making in all three plain rows.

5. Repeat the whole from *, till the comforter is the proper length.

6. Finish off the ends by a knitted fringe, or knotted tassels.

COMFORTER (No. 3) (*Imitation Network*)

Method.—1. Cast on an even number of stitches, and knit them off in plain knitting.

2. * Begin, the next row by placing the right-hand needle on the wool, then twist the wool round this needle and carry it behind it, so that one plain loop is made, then put the right-hand needle into two loops at the back, and knit them together *; repeat from * to *.

N.B.—Every succeeding row is the same, and the knitting resembles netting.

Class.—These comforters can be made by older scholars.

N.B.—Very pretty and useful comforters can be made by children in simple Garter stitch, or in Ribbed knitting or Brioché,

and finished off by a fringe of the same wool, which is at first wound round a stiff piece of cardboard, then cut at one end, taken off the card, and passed through the edge of the comforter or scarf, and tied by a slip knot. One stitch or rib is generally left between each tassel.

MUFFATEES (No. 1)

Materials.—Merino wool, Scotch fingering, Andalusian, single Berlin, and suitable needles.

Method.—1. Cast on forty stitches, and knit three plain and three purl, till large enough for the wrist.

2. Sew it up, leaving a hole for the thumb.

(No. 2)

1. Cast on seventy stitches.

2. Knit six rows backwards and forwards.

3. Knit six rows in double knitting.

4. Then knit three rows plain and three double, alternately.

5. Then knit twelve rows of double and six of plain, and if large enough cast off and sew it up.

N.B.—Brioche, Double, and Ribbed knitting are suitable for muffatees and wristlets.

MUFFATEE STITCH (No. 3)

1. Cast on an even number of stitches.

2. * Slip the first stitch and then knit as follows:—bring the wool forward, then take up a loop of the former row on the pin, purl one, take up one, purl one, and so on, till the row is finished.

3. Next row purl two together all through, and continue from *.

CHAPTER XII

SHAWLS

No. 1. A SHAWL IN GARTER STITCH

Materials.—4-ply gray, black, or cardinal Scotch Fingering, and No. 13 long bone or wood pins.

Method.—1. Cast on four hundred stitches on one pin.

2. Knit plain rows forwards and backwards, and, after the casting-on row, knit two stitches together at the beginning, middle, and end of every alternate row, till only one stitch is left, and then cast off.

3. Trim the edges with a simple crochet pattern, or with a fancy knitted edging.

N.B.—This forms a triangular or half-handkerchief-shaped shawl, the casting-on being the neck and front portion of the garment, and the casting-off the point in the middle of the back at the waist. This garment can be made by children, and is very saleable.

No. 2. A SHAWL IN FANCY STITCH

Materials.—Scotch Fingering, single Berlin, Shetland, Andalusian, or German Yarn.

Method.—1. Cast on an even number of stitches—ninety or one hundred—according to the size of the wool.

2. *First Row.*—(a) Knit the first and last stitches plain; (b) bring the wool forward and knit two stitches together.

3. *Second Row.*—(a) Knit the first and last stitches plain; (b) bring the wool forward, and then once round the needle, and purl two stitches together.

4. *Third Row*.—Knit plain.

5. *Fourth Row*.—Purl. Repeat from first row.

NO. 3. A SMALL SHAWL

Materials.—Double Berlin, Fleecy, Petticoat Yarn, and two wooden needles No. 15.

Method.—(a) Cast on ninety stitches. (b) Slip the first stitch in every row. (c) *First Row*—Knit plain. (d) *Second Row*—Purl. (e) *Third Row*—Slip the first stitch in the row, knit two together, make a stitch by bringing the wool in front of the needle, knit one. (f) *Fourth Row*—Purl. (g) *Fifth Row*—Slip the first stitch; * knit two plain, make a stitch, knit two together, knit one plain *; repeat from * to *. (h) *Sixth Row*—Purl. Repeat from the *third row*. (i) Finish the ends of the shawl by a fringe or by tassels, or by a knitted edging.

NO. 4. A SIMPLE SHAWL

Method.—1. Cast on five stitches, and knit them off.

2. Slip the first stitch, knit two plain, increase one stitch after the third stitch at the beginning of every row, and go on like this, till the shawl is long enough.

3. Knit eight rows plain, without any increasings.

4. Decrease at the beginning of every row by knitting two stitches together after the second stitch, until five stitches are left, and then cast off.

5. Trim the sides of the shawl by a crochet or knitted border.

NO. 5 SHAWL IN STAR STITCH

Materials.—Starlight Shetland Wool, or 3-ply Saxony ; two fine bone or wooden needles.

Method.—(a) Cast on two stitches. (b) *First Row*—Make one, knit one, make one, knit one. (c) *Second Row*, and all even rows—Purl. (d) *Third Row*—Make one, knit one, make one, knit three plain, and slip the first of these three over the last two. (e) *Fifth Row*—Make one, knit one, make one, knit three plain, and slip the first of the three over the last two, make one, knit one. (f) *Seventh Row*—Make one, knit one, make one, knit three, and slip the first of the three over the last two. (g) *Ninth Row*—Make one, knit one, * make one, knit three plain, and slip the first of the three over the last two *, repeat from * to *. (h) *Eleventh Row*—Make one, knit one, * make one, knit three plain, and slip the first one over the last two *, repeat from * to *, knit two plain.

N.B.—Continue knitting the same, till the shawl is large enough. When one stitch or two stitches are left on the needle, as in the ninth or eleventh row, cast off. Knit a wide border, or knit the fringe.

A PAIR OF MITTENS

Method.—1. Cast on seventy-two loops.

2. Knit garter-stitch, except at one end, when you must knit purl and plain for twelve stitches.

3. Continue this till you have knitted a piece long enough to go round the back of the hand and half round the palm.

4. Take off sixteen loops on the piece, at the opposite

end of the ribbing. (Slip the stitch at the beginning of every row, purlwise, for chain edge.)

5. Make sixteen loops, and cast on, so as to have seventy-two loops on the first needle. Put a string through the sixteen slipped loops, to prevent running down into ladders.

6. * Knit sixteen, knit two together, knit one.

7. Turn, knit eighteen.

8. Turn, knit sixteen, knit two together, knit one.*

9. Continue from * to * till there are about thirty-six stitches left on the main needle.

10. Cast off the sixteen stitches for the thumb, downwards, so as to meet the row of sixteen on the string and the thirty-six stitches.

11. Pick up the sixteen loops on the string, and continue plain knitting till long enough to join the edges.

12. Join or graft the sides of thumb.

13. Graft all the other edges.

N.B.—The joins can be made by sewing edges together on the wrong side, or by crochet on the right side.

CHAPTER XIII

EDGINGS—CHILDREN'S MUFFS

KNITTED LACE EDGING (No. 1)

Materials.—Linen thread, or knitting cotton, Nos. 16 to 30.

Method.—1. Cast on eleven stitches.

2. Knit or purl the first stitch in every row.

3. *First Row.*—Knit plain.

4. *Second Row.*—Knit three plain, bring cotton forward and knit two together four times.

5. *Third Row.*—Purl.

6. *Fourth Row.*—Knit four plain, bring cotton forward and knit two together three times, bring cotton forward and knit the last stitch.

7. *Fifth Row.*—Purl.

8. *Sixth Row.*—Knit five plain, bring cotton forward and repeat the fourth row.

9. *Seventh Row.*—Purl.

10. *Eighth Row.*—Knit six plain, and then the same as fourth row.

11. *Ninth Row.*—Purl.

12. *Tenth Row.*—Knit seven plain, and then as before.

13. *Eleventh Row.*—Purl.

14. *Twelfth Row.*—Knit eight plain, and then as before.

15. *Thirteenth Row.*—Purl.

16. *Fourteenth Row.*—Knit nine plain, and then as before.

17. *Fifteenth Row.*—Purl.

18. Knit ten plain, and then as before.

N.B.—There will now be 18 stitches on the needle.

19. Knit two rows plain, and cast off the open-work part of the pattern till there are eleven stitches left, then commence the pattern at the *second row*.

Use.—This lace is very suitable for trimming couvrettes, counterpanes, D'Oyleys (and shawls, which are half-handkerchief shape).

KNITTED EDGING (No. 2)

Materials.—Wool, crochet cotton, or linen thread.

Method.—1. Cast on six stitches, and knit them off.

2. *First Row.*—Slip one, bring the cotton forward and knit two together, cotton forward and knit two.

3. *Second Row.*—Slip one, and knit plain to end of row.

N.B.—Repeat the second row, after every pattern row.

4. *Third Row.*—Slip one, bring the cotton forward and knit two together twice, cotton forward and knit one.

5. *Fifth Row.*—Slip one, cotton forward and knit two together twice, cotton forward and knit two.

6. *Seventh Row.*—Slip one, cotton forward and knit two together three times, cotton forward and knit one

7. *Ninth Row.*—Slip one, cotton forward and knit two together three times, cotton forward and knit two.

8. *Eleventh Row.*—Slip one, cotton forward and knit two together four times, cotton forward and knit one.

9. *Thirteenth Row.*—Slip one, cotton forward and knit two together four times, cotton forward and knit two.

10. *Fifteenth Row.*—Cast off eight stitches, then bring cotton forward and knit two together, cotton forward and knit two. There will now be six stitches.

11. *Sixteenth Row.*—Slip first stitch and knit five plain.

Repeat from the first row till enough has been knitted for trimming a garment, or a couvrette, or counterpane, or any other articles.

Use.—This edging, knitted in No. 20, or finer Evans's cotton, makes a very strong trimming for children's under-clothing, *e.g.* drawers, flannelette nightgowns; but if in linen thread it makes a pretty trimming for frocks and pinafores.

ONE HOLE EDGING (No. 3)

Materials.—Cotton, linen thread, silk, or wool.

Method.—(a) Cast on eight stitches and knit them off.
 (b) *First Row*—Slip one, knit two plain, bring the cotton to the front and knit two together, put the cotton twice round the needle and knit two together, knit one. (c) *Second Row*—Slip one, knit two, bring the cotton to the front and purl one, put the cotton back and knit one, bring the cotton to the front and knit two together, knit two plain. (d) *Third Row*—Slip one, knit one, bring the cotton to the front and knit two together, knit the remainder plain. (e) *Fourth Row*—Slip one, knit one, pull the slipped stitch over the knitted one, knit plain, until there are only three stitches on the needle, bring the cotton forward and knit two together, knit one plain. Repeat from the first to the fourth row, till the edging is as long as it is required.

Use.—To trim edges of Penelope, shawls, sofa blankets, couvettes, and other articles.

ANOTHER EDGING (No. 4)

Materials.—Any kind of knitting materials; if cotton, No. 20, and needles No. 24.

Method.—Cast on seven stitches.

First Row.—Knit three, bring cotton forward and knit two together, bring cotton forward twice, knit two.

Second Row.—Knit three, purl one, knit two, bring the cotton forward, knit two together, knit one.

Third Row.—Slip one, knit two, bring the cotton forward and knit two together, knit four.

Fourth Row.—Cast off two (there will be three stitches), bring the cotton forward and knit two together, knit one.

There must be seven stitches at end of each scallop. Commence again as at first row.

EDGING (No. 5)

Materials.—Same as for No. 4.

Method.—Cast on eight stitches.

First Row.—Knit three, bring cotton forward and knit two together, bring cotton forward twice and knit two together, knit one.

Second Row.—Knit three, purl one, knit two, bring cotton forward and knit two together, knit one.

Third Row.—Knit three, bring the cotton forward and knit two together, knit one, bring cotton forward twice and knit two together, knit one.

Fourth Row.—Knit three, purl one, knit three, bring cotton forward and knit two together, knit one.

Fifth Row.—Knit three, bring cotton forward and knit two together, knit two, bring cotton forward twice and knit two together, knit one.

Sixth Row.—Knit three, purl one, knit four, bring cotton forward and knit two together, knit one.

Seventh Row.—Knit three, bring cotton forward and knit two together, knit one.

Eighth Row.—Cast off three (there are four involved), knit four, bring cotton forward and knit two together, knit one.

N.B.—There are eight stitches on needle. Begin again at first row.

VANDYKE EDGING (No. 6)

Materials.—Cotton, No. 20 ; needles, No. 26.

Method.—Cast on twelve stitches.

First Row.—Slip one, knit two, bring cotton forward and knit two together, cotton forward twice and knit two together, knit five.

Second Row.—Slip one, knit six, purl one, knit two, cotton forward and knit two together, knit one.

Third Row.—Slip one, knit two, cotton forward and knit two together, knit two, cotton forward twice and knit two together, knit four.

Fourth Row.—Slip one, knit five, purl one, knit four, cotton forward and knit two together, knit one.

Fifth Row.—Slip one, knit two, cotton forward and knit two together, knit four, cotton forward twice and knit two together, knit three.

Sixth Row.—Slip one, knit four, purl one, knit six, cotton forward and knit two together, knit one.

Seventh Row.—Slip one, knit two, cotton forward and knit two together, knit ten.

Eighth Row.—Slip one, knit one and pass the slip-stitch over it, knit one, pass stitch over it, knit one, pass stitch over it, knit eight, cotton forward and knit two together, knit one. There are twelve stitches. Begin pattern again at first row.

A CHILD'S KNITTED MUFF (No. 1)

Materials.—Fleecy wool and No. 8 needles.

Method.—(a) Cast on seventy-two stitches; (b) knit one row plain; (c) *Second Row*—Bring the wool forward, knit two together, repeat; (d) knit three plain rows; (e) repeat the second row alternately with three plain rows, until six patterns are worked; (f) knit five plain rows; (g) repeat the second row alternately with one plain row, three times; (h) knit twenty-three rows, turning the wool

round the needle and purling two together; (i) knit five plain rows; (j) repeat the second row alternately with one plain row, three times; (k) knit four plain rows; (l) repeat the second row alternately with three plain rows until six patterns are worked; (m) knit one plain row and cast off; (n) join the casting-on and casting-off edges together; (o) place a thick layer of cotton wool over the knitting on the wrong side, and lay over this a piece of coloured sateen or flannel, or any better kind of material, *e.g.* silk or satin, and quilt the lining; (p) draw up the side edges a little, and make a string casing in the lining for pieces of elastic, and finish off by a twisted woollen cord and tassels, or bows of ribbon.

N.B.—The sides may be drawn up by coloured silk ribbons, leaving the openings large enough for the hands to go in easily.

ANOTHER MUFF (CHILD'S), No. 2.

Materials.—Four different shades of one coloured fleecy wool, or double Berlin, and No. 8 needles.

Method.—(a) Cast on seventy or eighty stitches; (b) begin with the lightest shade and knit three plain rows; (c) *Fourth Row*, bring the wool forward, knit two together from the back of the stitches, repeat; (d) * knit three plain rows and repeat the fourth row *, and repeat from * to *, till the knitting is half a yard long; (e) the shades of the wool must be skilfully managed, beginning with the lightest and ending with the darkest shade, with $2\frac{1}{4}$ inches knitted in each shade; (f) line the knitting with a dark-coloured silk or satin, the glossy side being towards the knitting, and then pad with layers of cotton wool, or eider-down, or horsehair, and re-line with satin, silk, sateen, Italian cloth, or any other strong and suitable material. Finish off as described in Muff No. 1.

CHAPTER XIV

DOUBLE KNITTING—QUILTS—BLANKETS—FRINGES

DOUBLE KNITTING (No. 1)

Method.—(a) Cast on an even number of stitches, and knit them off in plain stitch; (b) begin the next and all succeeding rows as follows: * knit one plain, bring the wool forward and slip one purlwise, put the wool behind the needle and knit one plain, * repeat from * to *. This is worked on the right side of the garment.

Use.—This stitch can be used for comforters, couvettes, cushion covers, sofa blankets, shawls, muffatees, and for thickening the toes and heels of stockings and socks.

(No. 2)

Method.—(a) Cast on an even number of stitches, and knit them off; (b) knit the first two or three stitches plain at the beginning of every row, * then knit one plain, putting the wool twice round the pin to make a double stitch; next bring the wool in front of the needles and slip one as for plain knitting, and pass the wool behind the needle again, then knit one plain, putting the wool twice over the pin. * Repeat from * to *.

Use.—The same as for No. 1.

QUILTS, COUVRETTES, AND BASSINET COVERS

Materials.—Eight-ply Fleecy Wool and No. 4 needles, or finer wool and No. 6 needles.

Method. (a) Cast on any number of stitches that can be divided by three.

N.B.—If the pattern is worked in separate squares of 6 inches for a large quilt, cast on 45 stitches for each square. If it is worked for a baby's quilt, cast on 231 stitches.

(*b*) *First Row*.—Slip one, knit two taken together in the front, * turn the wool round the needle, and bring it again in front, slip one, knit two taken together in the front *. Repeat from * to *.

N.B.—1. Every row is the same, and the last two stitches at the end of the row are to be purled and knitted.

2. Work a border, or put a knitted or knotted fringe.

Sofa blankets, cushion covers, and a variety of articles can be made of knitted strips, which must be sewn together. Alternate wide and narrow strips of different colours make handsome sofa blankets and quilts. Children in the lower classes of the school could easily knit them in plain garter stitch, or in alternate squares of purl and plain. If any alternate wide stripe is marked in a cross-stitch design, the effect is excellent. Girls in the upper classes could mark the strips in variegated colours to suit the design.

Dusters, bath-towels, kettle and plate holders, can all be knitted by young children. Washing gloves can be made by girls, as the simplest shape is like the toe of a sock, or stocking.

KNITTED BLANKETS

Method.—(*a*) Cast on from 100 to 200 stitches, according to the size required, and knit twenty rows in plain and purl for a border; (*b*) then knit ten stitches in two plain and two purl at the beginning of the needle, and all the rest double knitting, except the last ten stitches, which must be knitted in the border stitch. Continue this, till the blanket is long enough.

Use.—These blankets, knitted in soft white Fleecy or Scotch Yarn, are suitable for infants' cradles, and for invalids, on account of their warmth and lightness.

FRINGE (No. 1)

Method.—(a) Cast on eight stitches; (b) knit two, bring the wool forward and knit two together, knit one, bring the wool forward and knit two together, knit one; (c) when the fringe is long enough, cast off five stitches, and unravel three for the fringe.

N.B.—This fringe can be knitted in any sized wool or cotton, according to the purpose for which it is intended. It may also be variegated by two or more colours, working alternately six rows of each colour.

SHAWL FRINGE (No. 2)

Method.—(a) Cast on five stitches; * (b) slip the first stitch, knit one, make one, knit two together, at the last stitch twist the cotton three times over the pin and the second finger, or over the pin and a netting mesh of the proper depth of the fringe, and knit it firmly on; (c) knit the next row plain *, and repeat from * to *.

CHAPTER XV

FANCY KNITTED STITCHES

SHELLS FOR A KNITTED COUNTERPANE

Materials.—Fine knitting cotton, or fingering.

Method.—(a) Cast on forty-five stitches and knit two plain rows; (b) *Third Row*, knit five plain, bring the cotton

forward, knit two together seventeen times, knit five plain; (c) *Fourth Row*, knit plain; (d) *Fifth Row*, knit five plain, bring the cotton forward and knit two together, purl one till there are only seven left, then knit two together and five plain; (e) *Sixth Row*, plain; (f) *Seventh Row*, the same as the fifth; (g) *Eighth Row*, plain; (h) *Ninth Row*, knit five plain, knit two together and one plain, till there are seven stitches left, then knit two together and five plain; (i) *Tenth Row*, knit plain.

N.B.—Continue the ninth and tenth rows alternately, until four ribs are formed (a rib is a row forwards and backwards), then narrow these stitches one at a time in the centre, till only one remains, and then cast off.

RUG STITCH

Materials.—White or unbleached knitting cotton, or coarse fingering of a common kind, and Fleecy or Smyrna wool. Needles to suit the cotton, or fingering.

Method.—(a) Cast on any number of stitches and knit one plain row; (b) begin the next row by knitting one plain stitch, then take the end of the fleecy wool and pass it from the front between the needles, and wind it round the left forefinger, or the first and second fingers (according to the length of loop required), and bring it to the front again between the needles, being careful to cross the wool; (c) knit a plain stitch and slip the loop off the fingers; (d) pass the wool from the front between the needles, and again wind it round the fingers to form a loop, and bring it to the front again between the needles, and then knit one plain stitch. Proceed like this to the end of the row, and then cut the fleecy wool; (e) turn the knitting, and knit one plain row back; (f) begin the next row by a plain stitch, and repeat from (b) to (d)

inclusive. When the rug is large enough, cut the loops of wool, being careful not to pull them out.

Use.—This kind of knitting is useful for borders of babies' hoods, hats, and bonnets, fisher caps, and for borders of knitted lamp-mats, for shoulder capes, as well as for bedroom rugs. Another advantage is that wools that have been previously used in antimacassars and other articles can be utilised in this way, and the colours can be harmoniously blended. In schools the rugs are very saleable, and children in lower classes could easily master the difficulties of the process.

IMPROVED KNITED OPEN HEM-STITCH

Method.—(a) Cast on any set of numbers divisible by four; (b) knit the first row plain; (c) slip the first stitch, knit the second, * then make a stitch by bringing the cotton in front between the needles, and knit two together *, repeat from * to * till the row is finished; (d) knit one row plain; (e) knit three rows purl; (f) knit one row plain; (g) repeat (c) from * to * and from (d) to (g), till the length of the knitting is what you require.

Use.—This stitch is very useful for muffatees, shawls, and comforters.

SHELL PATTERN

Method.—(a) Cast on twenty-five stitches for every pattern; (b) *First Row*, knit two together four times, bring the wool forward, knit one eight times, knit two together four times, purl one; repeat till all the patterns in the row are finished; (c) *Second Row*, purl; (d) *Third Row*, plain; (e) *Fourth Row*, purl; (f) begin again as in the first row.

N.B.—This pattern is useful for shawls, bassinet covers, quilts.

RAISED KNITTING

Materials.—German wool. Needles No. 16 and No. 10.

Method.—(a) Cast on any even number of stitches; (b) bring the wool forward and knit two together to the end of the row with No. 16 needles; (c) knit the next row with No. 10 needle, plain; (d) knit the next row with No. 16 needle, plain; (e) next row with No. 16 needle, purl; (f) begin again as in first row (b).

Use.—For hoods, shawls, muffis, muffiatees, scarves.

CROSS STITCH PATTERN

Method.—(a) Cast on an even number of stitches; (b) * make a stitch, knit two together from the back of the stitches *. Repeat from * to * to the end of the row. =

N.B.—Every row is the same. Be careful only to make *one* stitch by putting the wool between the needles.

Use.—This stitch is useful for shawls, comforters, and petticoats.

Class.—Older Girls would soon learn, and remember it.

ANOTHER PRETTY PATTERN (*Cross Stitch*)

Method.—(a) Cast on your stitches in numbers divisible by four; (b) knit two plain *, wind the wool round the needle twice to make a long stitch, and knit two together, knit two plain *, and repeat from * to *.

N.B.—Every row is the same.

Use.—If knitted in fine wool, *e.g.* Shetland and Andalusian, it is exceedingly pretty for shawls.

A RAISED STITCH IN KNITTING

Materials.—Berlin wool, Fleecy, Petticoat Fingering, or ordinary Scotch Fingering. Two wooden or bone pins in size to suit the coarseness or fineness of the wool.

Use.—This stitch is useful for scarves and comforters, shawls and petticoats, cushion covers, couvrettes, quilts, and antimacassars. If it is knitted in strips of different coloured wool and afterwards sewn together, twenty-six stitches should be cast on for each strip.

Method.—(a) Cast on an even number of stitches and knit them off; (b) *First Row*, knit one and purl the remainder; (c) *Second Row*, knit one, purl three together *, put back the wool, and then knit one, purl one (put back the wool), and knit one all in one loop (i.e. three loops are made out of one), purl three together, and repeat from *; (d) *Third Row*, knit one, purl the remainder; (e) *Fourth Row*, knit one, purl one, knit one, all in one loop *, purl three together, put back the wool and knit one, purl one, knit one, all out of one loop, repeat from *.

N.B.—There must always be a single loop at the end of each pattern row. Repeat from the first row, till the strip is long enough.

BRIOCHE STITCH

Method.—1. Cast on an even number of stitches, and knit them all off.

2. Make one, slip one, knit two together, repeat to the end of the row.

N.B.—1. The made stitch and the slipped stitch in every previous row must be knitted together in every succeeding row, and the two stitches made into one must be slipped.

2. Brioché is a very useful stitch. It can be employed for comforters, scarves, muffatees, cuffs, shawls, petticoats, and many other articles.

KNITTED BEAD FRILLING

Materials.—Wool, or cotton, or silk, and white, black coloured, steel or gold beads.

Method.—(1) Thread a needle, that will pass easily through the beads, with the knitting material, and pass as many of the beads as you think will be needed on to the wool, cotton, or silk; (2) cast on six, or eight, or ten stitches to form a tucker to be sewn to the neck and cuffs of the frock body; (3) * draw up as many beads as you would prefer to form a loop, and knit one plain stitch; (4) knit one plain, and draw up as many, or less, beads as in the first loop, and knit plain to the end of the row; (5) knit one row plain between every beaded row, and repeat from *, till the frilling is long enough for the size of the neck and wrist of the frock body. Knit one plain row and cast off.

N.B.—Knit rather tightly.

HONEYCOMB STITCH

Method.—(a) Knit the first stitch, put the cotton over the pin to make a stitch, knit two together, continue to make a stitch and knit two together, till the row is completed; (b) knit the next row plain, and so on, every other row honeycomb stitch.

KNITTED HERRING-BONE STITCH

Method.—(1) Cast on any number of stitches, allowing three for each pattern, and one besides at each end; (2)

knit a plain row ; (3) slip one *, purl two together, make one, knit one *, repeat from * to *, to the end of the row.

N.B.—Every row is the same.

KNITTED DRESS, BOOT, OR STAY LACE

Materials.—Strong black or white, or coloured linen thread, or silk, and very fine pins.

Method.—(1) Cast on four, six, or eight stitches, according to the size of the thread or silk ; (2) * push these stitches to the other end of the pin, so that you may begin the second, and all succeeding rows, at the casting-on end, where the short piece of thread is hanging ; (3) draw the thread or silk from the last knitted stitch very tightly round to this end, and knit plain to the end of the row, and repeat from *.

N.B.—Every row is the same. After casting off, finish off the ends of the lace by winding the self-same material tightly round them so as to form tags. The lace, if properly knitted, is round.

CHAPTER XVI

NETTING—CROCHET

NETTING is a very ancient art, for it was known to the Egyptians 3000 years ago, and many specimens of their nets are preserved in the British and Berlin museums. The needles employed in netting are also preserved, and resemble those which are still in use. Nets were formerly used for the hair, for corselets, as well as for fish, game, and vegetables. The art of netting in its most elementary and simple form has always been practised by fishermen and huntsmen.

Implements.—The implements needed for netting are (a) a mesh or pin, on which the loops are made, and by means of which their size is determined; (b) a needle shaped at each end into a fork of two prongs, the ends of the prongs meeting and forming a blunt point, which will allow of the needle being passed, either end foremost, through a small loop; (c) linen thread, or cotton, or twine, or silk, or braid, or chenille.

Method.—1. *Threading the Needle.*—The material of which the net is to be formed is first wound upon the needle by passing it alternately between the prongs at each end, so that the turns of the twine may be parallel to the length of the needle, and be kept on it by the forked ends.

2. *Making the Stitch.*—(a) The coarsest and the finest stitches are all made in the same way. (b) Make a long loop of coarse twine or tape, and fasten the netting cotton, silk, or twine by a knot to this loop, which may be held under the right foot, or to any other support, *e.g.* a heavy pincushion. This loop is called the *foundation* for the netting.

3. *Position of the Hands.*—(a) Hold the mesh or pin in the left hand, between the thumb and forefinger, close up to the fastening-on knot, under the netting cotton or twine; (b) hold the needle in the right hand; (c) pull the cotton downwards over the mesh and the left hand, and carry the needle round the third finger to the back of the hand, and cross the cotton on the left forefinger; (d) keep the first loop in position by pressing the left thumb against it, as well as the upper or front part of the mesh; (e) throw the netting cotton back over the left thumb, the foundation loop, and the little finger, bringing with this action the needle to the front again; (f) pass the needle

under the first loop, between the mesh and the fingers, and then under the foundation loop, in front of the cotton thrown backwards from the left thumb; (g) draw the needle out and disengage all the fingers of the left hand from the loops, except the little finger, which must still keep hold of the second loop, which was formed round it; (h) draw the netting cotton up to the pin, and draw the knot up quickly to the foundation by means of the tension of the little finger. Go on in this way, till sufficient loops have been formed on the foundation for your purpose.

Notes.—1. As the mesh is filled with loops, push it on to the right, so that some loops may fall off, at the left-hand end.

2. When the whole row is netted, draw the mesh out, and you will find a row of loops, equal in length, hanging from the foundation loop, and attached to it by knots, which will slide freely along it.

3. When one row is finished, turn the work over, so as to reverse the ends of that row, and to allow of the next row being worked in the same direction as that in which the first was made, *i.e.* from left to right.

4. To begin the second and all succeeding rows, place the pin close up to the bottom of the last row of loops, and repeat the actions with the needle as before, only instead of passing the needle through the loop of the foundation, pass it in succession for every new knot, through each loop of the row already made, each knot being thus formed at the bottom of the loop above it.

SQUARE NETTING

(a) Work one stitch into the foundation loop; (b) turn and net two stitches into this loop; (c) increase by netting

two stitches into the last loop of every preceding row, till the length of the side is what you require; (*d*) decrease by netting two stitches together at the end of each preceding row, until one stitch remains. Fasten off, and cut the first loop from the foundation; (*e*) stretch the square over a slate frame, and fill in the spaces by thickly darning over and under the netting cotton, in some design.

OBLONG NETTING FOR WINDOW CURTAINS

(*a*) Net into the foundation loop the number of stitches that will give the depth required, and then net till the curtain is long enough: the length will be the breadth, when the curtain is fixed; (*b*) stretch on a stiff piece of cardboard, and thickly darn the spaces in the centre in squares, diamonds, or other patterns, and darn a border on all sides of the oblong.

ROUND NETTING

(*a*) Leave two or three of the last stitches of the first row of netting on the mesh; (*b*) pass the needle through the first stitch, which was made on the foundation loop, and go on netting fresh stitches into the first row of loops, and push off the stitches of the preceding row, when the work requires it.

TWISTED STITCH IN NETTING

(*a*) Pass the needle through the stitch on the hand; (*b*) then instead of putting it under the loop from you, put it under the loop in preceding row, towards you, and draw up in the usual way. This gives a rounded or twisted stitch, which is very effective for mats, reticules, and bags.

CROCHET

Crochet is the French name for the hooked instrument with which this kind of work is produced. Crochet has long been known in Scotland, where it was originally called *Shepherd's Knitting*. Crochet is more generally considered *fancy work*, and is taken up purely as a means of recreation; but it is a very useful art, and a variety of articles of very beautiful designs can be made with a hook. Crochet edgings are more quickly manufactured than knitted ones, and they are especially suitable for trimming women's and children's underclothing. Crochet edgings are also employed to trim the edges of knitted vests, shawls, penélopes, counterpanes, and other useful articles. The crochet lace given below if made in fine cotton or linen, is almost like guipure lace, and is a most effective and durable trimming for children's clothing. If it is made in coarse cotton it is exceedingly useful for trimming blinds, toilet covers, and other household articles.

A HANDSOME CROCHET LACE, WITH FANCY BRAID
SCALLOPS

Apparatus.—A fine steel crochet hook, Evans's cotton, No. 24, and a knot of fancy braid.

Method.—*First Row.*—(a) Work from the right hand to the left; *fastening on*: make one chain stitch, and then put the hook through two loops of the braid, and draw a loop of cotton through them; there will now be two loops on the needle; make these into one by drawing another

loop of cotton through them; (*b*) make three chain stitches, and then put the hook twice under the cotton, and take up two loops of the braid, draw a loop of cotton through them, so that now there are four loops on the needle; draw a loop of cotton through two of these, thus leaving three loops on the needle; (*c*)* put the hook under the cotton twice, and take up two loops of the braid, and draw a loop of cotton through them to make them one; there will now be three new loops on the needle; draw a loop of cotton through two of them *, thus leaving *five* loops on the needle. Repeat from * to * *ten* times, when you will have eleven holes worked on the braid foundation; (*d*) for the twelfth hole (which forms the point), put the hook under the cotton *once*, and take up two loops of the braid, and draw a loop of cotton through as before, and then draw another loop of cotton through two loops on the needle. There will be *twenty-four* loops on the needle, and you must now work backwards, from left to right thus:—draw a loop of cotton through *two* loops at a time, till all the loops are fastened off, and only *one* remains on the needle.

N.B.—Putting the crochet hook under the cotton *once* means making a stitch, and under twice, making two stitches.

Second Row.—*Work from right to left.* (*a*) Make three chain *, and put the hook under the cotton *twice*, then miss one hole, and put the hook through the chain edge, in a slanting direction, and in the centre of the next hole, and draw a loop through; there will now be four loops on the needle; draw another loop of cotton through two of these, thus leaving three on the needle. Repeat from *, leaving this time two additional loops on the needle. Go on like this till there are *six* holes, the sixth hole being at the end of the seventh hole in the first row; (*b*) work eight double crochet stitches thus:—put the hook under

the cotton *once* (i.e. make a stitch), and put the hook into the chain, at the end of the eighth hole, in a slanting direction to the left, and draw a loop of cotton through two loops on the needle; go on, like this, working two double crochet stitches into each hole, and *one* double stitch in the twelfth hole, so that there will be *nine* double stitches beyond the six holes; (c) put the hook under the cotton *twice*, and take up two loops of the foundation braid (this helps to form the scallop), and then work backwards from left to right, as in the first row, decreasing and fastening off the second row, by drawing a loop of cotton through every two loops, till only *one* is left on the needle.

Third Row.—Work from right to left, and begin this and all succeeding rows with three chain (every row is begun in this way). In this row make *five* holes, in the same way as described in the second row, and nine double crochet (the double crochet belonging to the last hole is included in the *nine*), and one hole on the foundation braid, then work backwards from left to right.

Fourth Row.—A chain of three stitches, and *four* holes, nine double stitches, and one hole on the foundation, and then work backwards, as in the other rows. The first pattern and scallop is now made. Repeat from the first row to the fourth, making *three* holes above the four holes in the last row of the first pattern, and four holes on the double crochet, leaving one double stitch between each hole; the remaining five holes must be worked on the loops of the braid, as in the first row. (The first row of holes is worked entirely on the braid, but after the first pattern is completed, only the last five are worked on the braid foundation.)

CHAPTER XVII

STRAW WEAVING AND PLAITING

STRAW weaving and plaiting is still a very useful industry, and is carried on in Bedfordshire, Buckinghamshire, Hertfordshire, Essex, and, to a less extent, in some of the south-western counties. Swanage is noted for a special kind of plaiting. Girls in technical and evening classes can be taught how to weave and plait in simple patterns, and to make these up into work-baskets, floor mats, matting, and hassocks; lamp and dish mats; table-napkin rings, covers for the tops of wood tables, and chairs; blotting-pads, magazine cases, needle-cases, and other useful and saleable articles. Bundles of straw of all colours can be purchased at a low rate from Higgins, George Street, Luton. A straw-splitter can also be obtained from the same place, but a penknife answers the same purpose. Straw weaving could easily be made a *varied occupation* in an infant school, because it is not much more difficult than the kindergarten paper weaving for lamp mats, etc., and the kindergarten designs are applicable to this kind of work. Straw plaiting is educative, for it trains in *tidiness, long patience, skill, accuracy, power to observe and design*, and to *construct neatly, beautifully, and exactly*.

The straw reeds differ in size; the finest are best for table-napkin rings, table mats; the medium size for work-baskets, the tops of tables and seats and backs of chairs (made of wood); for covers of needle-books, blotting-pads, magazine portfolios; and the coarsest for floor mats and matting, and for making hassocks (*Church basses*). The

finest straw weaving must be lined with *Bristol* cardboard, but the coarse must be lined with sackcloth; and hassocks must, in addition, be stuffed with flock, or shavings, or bits of straw, or bran. The straw reeds are dyed all kinds of colours, and in plaiting may be whole or split. Teach the simplest pattern first, and make it up in the simplest of articles, *e.g.* a book cover, or table mat, or table-napkin ring.

A BLOTTING-PAD

Apparatus.—Fine straw reeds of two colours (cream and crimson, or cream and green), a *straw-splitter* or sharp penknife; *Bristol* cardboard, needle, and sewing cotton; scissors, a heavy weight, *e.g.* a letter press, or a flat smooth stone.

Method.—1. (a) Take two straw reeds of the different colours and divide them exactly into halves, with the straw-splitter or penknife; (b) lay the two *splits* on the desk or table and flatten them with the rounded end of the knife handle, without breaking them; (c) place these flat straws, with the right sides uppermost, in vertical lines, and in alternate colours of cream and crimson, well under the heavy weight (which is used to keep them in their place, while weaving), and quite close together, without over-lapping; (d) go on splitting and flattening the straws, and placing them in even vertical lines of alternate colours under the weight, till you have got the *width* which you require.

N.B.—If the straws should break, while you are weaving, you must push a new one under the broken part, matching the broken straw in colour and in breadth. If you require a greater length for your cover than the length of the straws will give, you must push new straws under, at irregular distances, so that

the joins may not be made in a straight row, and thus be very perceptible.

2. *Weaving the Pattern for the Outer Covers.*—(a) The simplest pattern should be attempted at first, *e.g.* under one, over one, or under two, over two, as in simple darning; (b) after splitting and flattening the cream and red straws, begin to weave from the right-hand side towards the left, by pushing the cream straw under one, over one, till it lies in a perfectly horizontal line, close to the weight; (c) the next straw should be crimson, and should be woven this time over and under the vertical lines, and pushed close to the cream straw, without overlapping it; (d) go on in this way with the alternate colours, and alternate pattern, till you have woven the length required.

N.B.—If the straws have all been kept quite straight and close together, the piece woven will be stiff and firm, and the two different colours will produce a very pretty effect.

(e) To prevent the straws from slipping out at the four edges, tack them together, by pushing the needle through the crossing straws, away from you, and then from the wrong side towards you, on every side of the oblong, or square.

3. *Bristol Cardboard.*—If the woven straw is intended for blotting-pads, or magazine, or book covers, or napkin rings, it should be oblong in shape. (a) Cut the cardboard most exactly, and place the woven straw over it, edge to edge, and with an ordinary fine sewing needle and cotton fasten the straw work to the cardboard, by long stitches downwards and upwards, letting the stitches touch each other as in stitching.

4. Recapitulate (if teaching a class) by making the outer covering of the opposite back, which must be woven,

and fastened to the cardboard in precisely the same way. The two backs must correspond in length and width exactly.

5. The *Inner*, or wrong sides of the backs must be woven in one colour straw splits (cream would be the better of the two), and must be fastened to the cardboard in the same way as the outer coverings.

N.B.—The edges will now be very jagged and untidy, and must be cut quite straight and even.

6. *Binding the Edges.*—(a) Pare the edges of all broken bits of straw with a sharp pair of scissors, and bind them with moderately wide Russian or worsted braid (black or crimson in colour), by placing the braid equally over the edges, both on the right and wrong sides, and closely stitching it together by passing the needle through all the thicknesses, downwards and upwards; (b) bind the two backs together by a broad strip of Russian or worsted braid (black or crimson, to match the binding on the edges) thus:—measure the length of the backs, then cut off the braid, allowing extra to the length for hems at the top and bottom of it; hem the braid on the wrong side, and then turn to the right side, and stitch it across in parallel rows to help to flatten it (iron it on the wrong side as well); when this broad strip of binding is ready (if the edges are bound in velvet, or corded silk, or satin ribbon, this broad binding must be the same in texture and colour), place the backs with right sides downwards to the wrong side of the braid, a little distance from the edges of the braid, and put in a few pins to keep them in place, then turn the right side towards you, and stitch the edges of the braid to the binding on the backs or covers; turn to the wrong side, and fell the bound edges to the broad binding, to make the backs or covers lie quite flat and straight; (c) sew a piece of broad flat elastic to the

top and bottom hems of the broad binding; (*d*) take some sheets of white or coloured blotting-paper, and cut them to the size of the covers, and put them under the elastic, exactly in half.

- N.B.*—1. The magazines, or papers that you may want to keep clean and in order, can be placed under the elastic, in the same way.
2. This book is quite an ornament to a table, and is quickly made, besides being very inexpensive. The materials (if a number were made at a time) would not cost more than 6d. with braid bindings.
 3. The edges of the covers, both inside and out, can be strengthened and still more ornamented by straw plaits, harmonising in colour with the colours of the weaving. Straw plaits, even if woven by the worker, would make the article still more costly.

TABLE-NAPKIN RINGS

Apparatus.—Very fine split straws, etc.

Method.—(*a*) Place the split straws of varying colours, in alternate rows, *horizontally*, under the heavy weight, which may rest at the right or the left hand; (*b*) the pattern may be exceedingly simple as for the above, or may be elaborate; (*c*) weave the straws in vertical lines, and these may be of one colour only, to produce a pretty and novel effect; (*d*) before fastening the straw work to the Bristol cardboard, line it with a dark shade of sateen of the predominate colour in the straw, drawing the edges of the sateen over the edges of the cardboard, and fastening them together by long stitches (like the strands for stocking-web stitch); (*e*) the cardboard will now have a right and wrong side, and of course must be the same depth and length as the straw work; place the wrong side of the straw work to the uncovered or wrong side of the cardboard, as exactly as it is possible, and tack it, as described in making the *blotting-pad*; (*f*) bind the

edges with ribbon velvet, or braid, as described before ; (g) bring the two short ends together, and unite them by seaming the edges of the binding neatly and strongly together, or sew on to each end, at the top and bottom of the vertical edges, ribbon strings, and then bring these edges together by tying the ribbon in pretty bows.

N.B.—1. The children in a kindergarten school could easily weave the straws, and with a little assistance from the teacher make these simple and inexpensive, yet beautiful and durable, rings.

2. The author hopes that infant teachers will try this straw weaving, as a *varied occupation*, in their schools.

TABLE MATS

Shapes.—Square, oblong, circular, and elliptical. The straw splits should be rather fine, to make the weaving close and strong, and the mats should be bound with strips of coloured American leather, or straw plaits, both for suitability to the use, and for durability. If the mats are circular in shape, the straw weaving must be a square larger on all sides than the circular cardboard, which must be cut with mathematical exactness ; if the shape is elliptical, the weaving must be in the form of an oblong, and cut to the shape of the cardboard. The wrong sides of the mats must be covered with the straw work, and if woven of different colours, can be reversed, when the side which has been most in use, is soiled or faded.

N.B.—1. The straw dyes are generally good, and therefore the mats can be wiped with a clean, warm, damp cloth, if they are stained with gravy or grease.

2. Toilet tidies, wall-pockets, canoe-shaped knitting baskets, ladies' cap baskets, key baskets, work-baskets, waste-paper baskets, and a number of useful, household articles can be manufactured, when once this kind of work is set going. Indeed it is a handiwork that calls forth ingenuity and taste.

STRAW COVERS FOR WOODEN TABLES AND CHAIRS

Apparatus.—Small *gipsy* tables, children's chairs, milking stools, straws, etc. etc. Small, fine, tin tacks, and a hammer, needle and cotton, scissors.

Method.—(a) After weaving the straw splits into an effective pattern, *e.g.* the diamond, wave, twill, etc., place it on the table, and cut it to the shape and size, being careful that the straw work is quite close to the edge; (b) fasten it down at certain regular distances with the tin tacks, which must be carefully hammered in, so as not to split the straw too much; (c) when this is successfully accomplished, ornament the edges and also cover over the rough edges of the weaving, either by broad straw plaits, fastened to the table by *star nails*, in the spaces between the tin tacks, or by a broad webbing, to which is attached chenille ball fringe, or the ordinary long woollen fringe. If the edges are finished off by straw plaits, a fringe with a very narrow webbing can be placed between it and the straw work.

N.B.—This is of course advanced work, and to be effective in design, and finished in style, must not be attempted till the art has been thoroughly mastered. Table and chairs, and stools, so ornamented, are almost like inlaid wood-work, and are certain of a ready sale.

STRAW PLAITS

A SIMPLE PLAIT OF THREE

Apparatus.—Straw reeds of one colour, or three colours, split or whole; a sharp penknife, scissors, and a little clean water in a tin mug or glass.

Method.—(a) Take a whole or a split straw and double it in two, letting the ends be unequal; (b) lay a second straw in a slanting direction between the double part of

the first straw, so that there are three ends, which must be held upright between the finger and thumb of the left hand; (c) fold the right straw over and under the middle one, and flatten it well (in flattening the straw, moisten the tips of the fingers a little to soften the straw, and thus prevent its breaking, but do not make it wet, or the gloss will be spoilt); (d) fold the left hand straw over and under the middle one, and flatten it with the finger and thumb as before.

N.B.—1. Continue thus all the way along, remembering, when joining a new straw, to let the ends all lie on the outer edges.

2. Observe in plaiting that the straw is always *folded* over, as you would in plaiting paper, and the edges are kept even.

PLAIT OF FOUR

Apparatus.—Straws of two or four colours, and the rest is as in plait of three.

Method.—(a) Double two straws, so that all the ends shall be of unequal lengths, and hold the ends upright, between left thumb and forefinger, and plait as follows:—put the right-hand straw over one, and under one; (b) put the left-hand straw under one; (c) again put the right-hand straw over one, and under one, and so on.

N.B.—Join as described in *Plait of Three*.

Notes.—1. If space would permit, plaits of various kinds, from three to sixteen, could be given.

2. If ladies take up straw work as a useful pastime, they should work it in an uncarpeted room, and on the top of an ordinary deal table (without a table-cloth). The straw chips are difficult to brush out of carpets and table-covers. An apron should be worn, while weaving and plaiting.

3. School-girls should be taught how to keep the ends and chips all together, so as not to litter the desks and floor.

4. Straw weaving and plaiting would be a good subject for technical classes in rural districts.



PART III

CUTTING-OUT

DIVISION *A.*—SECTIONAL DIAGRAMS AND CONSTRUCTION

DIVISION *B.*—FOLDING METHODS AND DIAGRAMS



DIVISION A.

CHAPTER I

HINTS ON CUTTING-OUT

IN cutting out garments, it is not only necessary to consider the selvedge of the stuff, the sizes and proportions, but also the width and suitability of the materials. In calculating how much material is needed for one garment, and for a set of garments, the width must be thought of, to avoid waste in buying too much, or false economy in buying too little. It is, as a general rule, better to buy material of the width required in the widest part of the body of the garment (for instance, one-yard-wide calico for women's chemises, drawers, and bodices, and men's night-shirts) than a narrower material, which would necessitate joins or gores. Oxford shirting varies in width for men's and boys' day-shirts. Fine linen, or lawn, or cambric, is usually the width required for an infant's first open shirt. Wide material is, however, very economical in the hands of an expert cutter, for the strips off the width can be utilised for other parts of the garment, *e.g.* yokes, binders, collars, collar-bands, front folds, wrist-bands, straight waist-bands, and false hems, gussets, gores, and sometimes for small-sized infants' garments.

Infants' garments are always cut out wider in comparison

to the length, for instance, the width of an infant's first shirt (open) is twice and one-fifth of its length; of an infant's closed shirt (second size) once and one-eighth of its length; a five-year-old child's knickerbocker drawers should be once and a half its length. Infants' shirts and shifts are frequently squares, but as the children advance from infancy to boyhood and girlhood, their garments are increased in length, in greater ratio than the width. Baby linen should be cut out with great accuracy and skill, and should be made up with the most scrupulous neatness and cleanliness. The patterns should be so contrived that they can be put on with the greatest comfort and ease to the baby, and made to tie, or button easily. No hard seams, buttons or strings, should come in contact with their tender skin.

Linen, including lawn, cambric, and holland, should be cut by the thread.

All calicoes, muslins, flannels, and prints will tear; if, however, these materials are flimsy, they pull out of shape a good deal, when they are torn.

Small parts of a garment, *e.g.* gussets, shoulder-straps, narrow false hems on the straight, should be cut instead of torn, as they are apt to pull out of shape.

Cutting out whole sets of things together often prevents waste, hence it is better to cut out three, six, or twelve shirts at once, than one at a time.

Sleeves, shoulder-straps, binders, yokes, collars, neck-bands, waist-bands, wrist-bands, and everything liable to be stretched in wearing, must be cut selvedge-wise.

Frills, flounces, and parts frilled between bands, are usually cut the width way of the material. Linings of all irregular shapes, *e.g.* collars of blouses, children's capes, curved armholes of shirts, and chemise sleeves, must be

cut on the cross. All materials should be suitable to the garment, and to its use ; for instance, a working man's or boy's shirt should be made of good stout shirting, and not of fine Horrocks' calico ; a working woman's wrapper-apron should be made of coarse Hessian or good brown holland, instead of print ; an infant's first shirt of lawn or cambric, or (if the price of the first-named materials cannot be afforded), of soft Nainsook, or fine Horrocks' calico.

In cutting out such garments as shirts, nightgowns, chemises, legs of drawers, frock and dress bodices, and pinafores, where the side slopes and curves are alike in shape, it is always best to fold the materials in halves, and cut both sides together, instead of separately.

Materials with patterns, and with decided right and wrong sides, must always be faced, when cutting out two opposite sides of the garment, like the right and left arm sleeves, the right and left fronts and backs, the right and left side pieces, and the gores of the skirt.

There are many different scientific scales for proportions in garments, and these are built upon either the neck, or the bust, or the height measure.

CHAPTER II

FIRST LESSON IN CUTTING-OUT

A DRAWING LESSON

Class. — Upper Classes, also Pupil and Student Teachers.

Apparatus.—*For the Teacher.*—Chequered black-board,

chalk, T-square, inch-measure, pencil, a finished night-shirt, or nightgown.

For the Class.—Sectional Exercise books, pencils, rulers, pens, and inch measures.

Method.—1. (*a*) Elicit that the chequered board has been previously used to draw diagrams of needlework stitches; (*b*) tell the class that in cutting-out lessons, the board will be used to draw diagrams of garments; (*c*) write the word *diagram* on the board, and elicit, or explain, its meaning; (*d*) tell the class that they draw the diagrams of garments in an Exercise book, so that they may be able, either to commit them to memory, if required to do so, or to refer to them, while they are cutting out the patterns in lined paper or calico; and that a book of diagrams of underclothing, baby-linen, and children's garments will be most valuable to them, in after years.

N.B.—A book is more portable, and can be better kept than loose paper patterns of garments.

2. (*a*) Compare the size of the squares on the chequered board with those on the sectional paper of the Exercise books by measuring the lines of a square on the board with the inch measure, and demonstrating that they are one inch every way, then tell the class to measure a square on their paper, and elicit that it is a quarter of an inch every way; (*b*) explain that the drawing on the board will be full size, but the drawing on the sectional paper will be one-fourth the true size, so that all the drawings are done to scale:—the board one inch scale, the paper one quarter inch scale; (*c*) write the word *scale* on the board, and elicit, or explain its meaning.

N.B.—Scale is less measurement in proportion to the full, or true size.

3. Point out (a) that the chequered board and sectional paper represent material of some kind, *e.g.* lined cutting-out paper, calico, shirting, holland, flannel, print.

(N.B.—This is advisable, in order to show how to manage the stuff economically.)

(b) That the board is one yard wide, and is divided into quarter yards in its width and length by red or blue lines, for greater convenience in drawing the diagrams; (c) that the quarter inches on the sectional paper must be called inches in counting.

4. *The Drawing Lesson.*—(a) Make a mark, where two lines intersect each other, on the left-hand side of the board; (b) the class must do the same on their sectional paper; count to the right in a straight line four squares (beginning to count at the end of the first square to ensure accuracy), and put another mark, where the lines intersect each other; (c) the class must do the same on their paper; (d) tell the class that, as we shall want to speak about these marks, we give them letter names, like a problem in Geometry or Euclid; (e) name the first on the left-hand side A, and the other to the right B (Fig. 160), the class doing the same on their paper; (f) tell the class we want to join A to B, and elicit that we can do so by drawing a straight line; (g) draw a line from A to B by using a T-square and white chalk, and tell class this line is called AB; (h) elicit that this straight line is horizontal; (i) let the class draw a line from A to B, and examine their work; (j) count down from A eight squares,

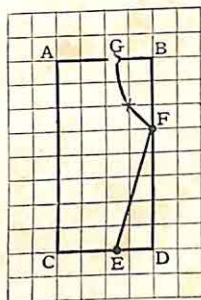


FIG. 160.

- (1) Diagram.
- (2) Scale.
- (3) STRAIGHT LINES (a) vertical, (b) horizontal.
- (4) Slanting lines.
- (5) Curved lines.

and put a mark and call it C, the class working with you this time on their paper; (*k*) let the class tell you how to join A to C, viz. by a straight line, and elicit that this line is vertical; (*l*) join A to C, the class doing the same on paper (Fig. 160); (*m*) elicit how to finish the oblong by counting four squares from C, and marking the intersecting lines of the fourth square D, then join B to D and C to D, the class working with you; (*n*) write the words straight, horizontal, and vertical on the board, the class writing the same on their paper; examine work; (*o*) show where these straight lines will come in a garment, viz. *vertical*, down the sides of a pinafore, apron, cloak, and petticoat, *horizontal*, at the bottom of pinafores, aprons, chemises, and shirts.

N.B.—Straight lines are the simplest to draw and to cut.

5. (*a*) Count from C towards D $2\frac{1}{2}$ inches, and mark it E, then count up from D towards B 5 inches, and mark it F, the class working with you; (*b*) show class how to join E to F by another kind of straight line (Fig. 160), and elicit when the line is drawn on the board, that it is a *slanting line*; (*c*) let the class join E to F on their paper, then examine their work, and write the word *slanting* on the board (Fig. 160); (*d*) show where slanting lines will come in garments, viz. on the shoulders of bodices, shirts, and yokes, frock and dress bodies, the sides of chemises, gores of petticoats, and other garments.

6. (*a*) Count in from A $2\frac{1}{2}$ inches, and mark it G, then count down 2 inches from B and in 1 inch, and put an X (Fig. 160), the class doing the same; (*b*) show how to join G to F through X, beginning by a straight line for 1 inch, then curving the line till it touches F; (*c*) the class to join G to F in the same way (Fig. 160), examine

work, and write the word *curved* on the board (Fig. 160), and show where curves come in garments, viz. at the necks of yokes, and shirts, and nightgowns, chemises, armholes of frocks, bodices, etc.; (d) elicit that curved lines are the most difficult to draw, and explain that much practice is needed in order to become skilful, both in drawing and cutting them; (e) tell class that the diagram is finished now, and that it is composed of the lines which are needed, in most garments we wear; (f) question class, by way of recapitulation, to ascertain that the chief points of the lesson have been apprehended; (g) let children draw ink lines over the pencilled ones, and copy in penmanship the words written on the board.

N.B.—This may be done in school at the close of the lesson, or as a supplementary home-lesson.

Notes.—1. The name of the diagram should be given in the next drawing lesson.

2. It is more practical to draw some part of a garment, than to draw a purely geometric figure, in teaching the various kinds of lines that occur in garments.

3. The chequered black-board is made on the principle of kindergarten and mathematical boards. It is divided into inch squares by white lines, every 9 inches being painted red or blue, to indicate the quarters of the yard. The board is usually 1 yard wide, and from 30 to 45 inches long.

CHAPTER III

CUTTING-OUT A YOKE BY MEASUREMENTS AND DRAWING

(To Cut out in Paper—Newspaper or Lined Paper)

Class.—The same as in first and second lessons.

Apparatus.—*For the Teacher.*—Chequered board with

a diagram (*e.g.* Fig. 160) drawn on it, slate, chalk, lined paper, scissors, inch measure, and pencil.

For the Class.—Chequered Exercise books with a diagram drawn (*e.g.* Fig. 160), lined paper, scissors, inch measures, pencils.

Method.—1. (a) Tell the class that the lines going up and down on the paper are $\frac{1}{4}$ inch apart, and represent the selvedge; (b) write the word *selvedge* on the slate, and elicit or explain the meaning, “self-edge” *i.e.* the tightly-woven manufactured edge, which borders the width of all materials, and runs up and down with the length; (c) explain that the selvedge threads are stronger, and will bear greater strain than the woof threads, and are not so easily pulled out of shape, for this reason the selvedge of materials goes *down* in most garments from neck and waist to the hems, and from shoulders towards the wrists in sleeves, but *round* the neck and waist in collars, neck-bands, and waist-bands, and *across* the back in yokes; (d) tell the class that it is wiser and more economical to cut out a pattern in paper first, before cutting out in the right material, because the same diagram can be used, even if a yoke of greater or less dimensions is needed, provided that the parts are cut in proportion to each other; (e) write the word *proportion* on the slate, and elicit or explain its meaning—*proportion is size always in comparison*; (f) tell the class, that when garments are cut out in good proportions, they always fit well, and are always more comfortable, durable, and tasteful, than ill-proportioned articles; (g) illustrate the term proportion by the diagram of the yoke thus:—The length is twice the width; the shoulder slope is nearly twice the curve of the half-neck, and the middle of the back is the same as the width across the shoulder-part.

2. *Cutting-out.*—(a) Explain that as the lining of the yoke is the same in dimensions as the yoke, only an oblong 16 inches long and 4 inches broad is needed for a pattern; (b) show class how to place the paper on the desk, with the right side uppermost, and the lines going up and down towards them, and (with the inch tape) measure from the left-hand top corner towards the right 4 inches, and put a pencil mark, then measure down from both top corners 16 inches and put marks; (c) show the class how to hold the scissors with the sharper point upwards, the thumb being placed in the upper ring, and the third finger in the lower one, and then how to cut off in a smooth straight line the oblong 16×4 ; (d) tell class to hold the paper up that you may see that it is cut correctly; (e) show how to fold the oblong across in half its width, so that it is 8 inches long, and then place it on the slate drawing to let class see that it is like the diagram in length and width; (f) let class fold theirs in half in the same way, and hold it up that you may examine collectively; (g) tell class to place the folded edge towards the top of the desk, and, while obeying your directions, to refer to their books as well as to the board; (h) tell them to measure in towards B from left-hand top corner, *i.e.* A, $2\frac{1}{2}$ inches and put a pencil mark, then elicit what other part of the diagram is of the same measurement, *viz.* from left-hand bottom corner, *i.e.* C, towards D, and put another pencil mark, then measure up from right-hand bottom corner 5 inches; (i) show the class how to crease the slanting line by folding the paper from E to F; (j) show how to cut off this piece of paper in a straight smooth line; (k) then measure down 2 inches from right-hand top corner and 1 inch in and put an X, then show them first how to cut the curve, beginning in a straight line from G and curving the

scissors round through X out to F, being careful not to curve inwards too much; (l) tell the class to cut the curve and then hold up pattern for you to examine; put your own pattern on the drawn diagram to let them see it is full size, and that the lines and curve correspond to those on the slate; call out two or more girls, and let them compare their patterns with the diagram on slate; (m) elicit that the oblong for a yoke in calico, or shirting, must be 16×8 inches.

N.B.—Explain to the class that curves, especially at the neck and armholes of garments, should never be cut deep at first; that, for this reason, it is always best to draw them a less size than they are needed when cut, because curves can always be cut deeper to suit the size of neck or armhole, if small at first, but if they are large at first, they may spoil the shape, and nothing can be done to remedy the evil. Dressmakers and Shirtmakers always take this precaution, in cutting curves at necks and armholes.

3. Let the class open their paper patterns, and compare the proportion of one part with another, and call upon them to name the various parts as you point them out, *e.g. neck, shoulder-slope, shoulder-part, back, and middle of back.*

4. Give the girls another piece of lined paper, and tell them to cut out a second pattern from the same diagram, either in school, or as a supplementary home-lesson. Examine this second effort, giving marks of approval and encouragement, and placing the patterns on the slate diagram, to prove their accuracy.

Jagged and saw-like cutting, as well as inaccuracy, must be condemned, while clean-cut, well-shaped slopes and curves must be praised.

CHAPTER IV

PINAFORES AND OVERALLS

COTTAGE PINAFORE (Figs. 161 and 162)

Suitable Materials.—*Holland* from 32 to 36 inches wide. Good brown holland can be purchased from $6\frac{3}{4}$ d. to $10\frac{3}{4}$ d. per yard. *Prints* are usually 34 inches wide and vary in price from $4\frac{3}{4}$ d. to $6\frac{3}{4}$ d. per yard. *Diaper* is 36 inches wide, and from $6\frac{3}{4}$ d. to 1s. $6\frac{3}{4}$ d. per yard. *Yosomite* is from 28 to 32 inches wide, and from $4\frac{3}{4}$ d. to $6\frac{3}{4}$ d. per yard.

Quantity.— $1\frac{1}{2}$ yards of either of the above materials will be sufficient to cut two pinafores, allowing for a deep hem at the bottom and a few tucks, in Print and Yosomite. The waist-band can be obtained from the extra material off the width, as 32 inches are only needed in the garment. This size pinafore fits a child of two or three years of age.

Cost of Two Holland Pinafores:—

$1\frac{1}{2}$ yards of holland at $8\frac{3}{4}$ d.	. . .	1s. $1\frac{1}{4}$ d.
Sewing cotton and tape about	. . .	0 $1\frac{1}{2}$
		<hr/>
		1s. $2\frac{3}{4}$ d.

Cost of one about $7\frac{1}{2}$ d.

2. *Hems*.—The armholes must be finished by narrow hems. The neck must have a hem about $\frac{1}{2}$ or $\frac{3}{4}$ inch deep, care being taken not to pucker the hems at the shoulder seams.

N.B.—With the greatest skill in cutting the curves at the neck, it is impossible to prevent the hems from being a little narrower at the shoulder seams.

The right back end of neck hem must not be seamed up, but the left back end may be, if an eyelet hole is worked on the right side of the hem to bring the tape through. This eyelet-hole should be 1 or $1\frac{1}{2}$ inches from the end of the hem, to allow of lapping the right back over the left. The bottom hem should not be less than 1 inch deep in Holland and Diaper, and may be $1\frac{1}{2}$ to 2 inches deep in softer materials, *e.g.* Print, Yosomite, and Zephyr. A few tucks above the deep hem are a great improvement. The deep hem and tucks can be obtained, if $\frac{3}{4}$ of a yard are put into each pinafore. The bottom hems must be seamed at each corner. If 32-inch material is used there will be no raw edges down the backs, and no need of hems; but if a strip is taken off a wider material for waist-strings, a raw edge will be left on one selvedge side, which should be put to the right back. A hem of $\frac{3}{4}$ or 1 inch wide will be suitable, in all the above materials.

3. *Trimming*.—The armholes are greatly improved by a frill of the same material, the fulness being half as much again as the length of the armhole, and about 2 or 3 inches deep at the shoulder part, and narrower towards the end of the armholes. The material for these frills can be taken off the whole width of the stuff, before the

pinafores are cut out. For instance, the pinafore is 21 inches long, if to this length 3 inches is added for hem and tucks, there will be 6 inches left from the $1\frac{1}{2}$ yards length of stuff.

4. *Strengthening Tape*.—Place shaped strengthening tapes at the ends of the armhole slits (see Lesson on Strengthening Tapes).

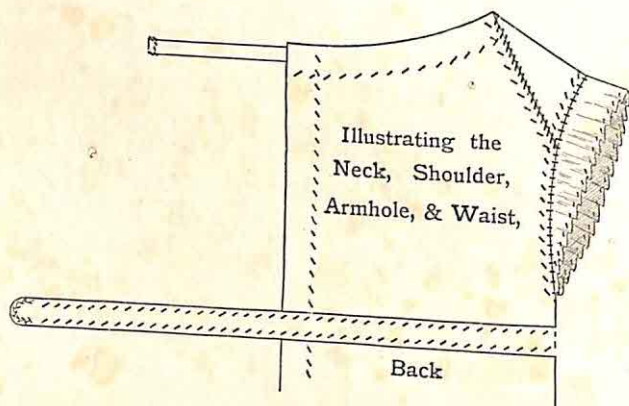


FIG. 162.—Finished Appearance of Fig. 161.

5. *Tape Strings*.—Run a piece of moderately wide tape through the hem at the neck, bringing it out at the eyelet-hole on the left back, and letting a half of the length of tape be in the middle of the front part of neck. Stitch the garment here on the right side quite through the tape, in two parallel rows, selvedge way, $\frac{1}{4}$ of an inch apart. Turn down narrow hems at each end of tape, to make them very neat, or buttonhole the ends to prevent ravelling.

N.B.—If waist-strings are not used, tapes must be sewn on to each side of backs, about one-third of the whole length of pinafore, from the neck towards the waist. The tape on the right back must be put on the wrong side of garment and hemmed and seamed, or stitched at the edge; the tape on the left back must be placed the same distance from the selvedge as the eyelet-hole on the neck hem, and must be stitched on all sides to the right side of the garment.

6. *Waist-strings* should not be less than $1\frac{1}{2}$ yards long altogether, nor less than three inches wide. They must be neatly hemmed, and may be rounded at the ends. Divide the string in half and fix it to the centre of the front, 9 inches from the neck. Pleat it twice, and stitch it in the centre, selvedge way, and then on either side of the centre in parallel rows, about $\frac{1}{2}$ an inch apart.

MATERIALS, QUANTITY, COST, AND CONSTRUCTION OF MUSLIN PINAFORE (Fig. 163)

Suitable Materials.—Varieties of muslin, *e.g.* Mull, Nainsook, Figured and Cross-bar, Indian, Madras, and De' Laine.

N.B.—The other materials suitable for the same pattern are Sateen, Yosomite, and Print. Muslins vary in width, Mull muslin and Nainsook are sometimes 40 inches wide, the other varieties are usually one yard wide. The prices vary from 6 $\frac{3}{4}$ d. to 1s. 4d. per yard.

Quantity must depend on the size and width of the material. For one garment the same size as Fig. 163, $1\frac{1}{4}$ yards of Nainsook of from 36 to 40 inches wide will be ample. In making three such pinafores $3\frac{3}{8}$ yards would be sufficient.

Cost of one Garment—

1 $\frac{1}{4}$ yards of Nainsook at 6 $\frac{3}{4}$ d. per yard	Os.	8 $\frac{1}{2}$ d.
2 $\frac{1}{2}$ „ embroidery trimming at 4 $\frac{3}{4}$ d. per yard		1 0
Cotton, sewing and crochet, and pearl button	about	0 1 $\frac{1}{2}$
		<hr/> 1s. 10d.

N.B.—If trimmed with *patent lace* or *everlasting edging*, the cost of one garment would be about 1s. 3d., or 1s. 6d.

Construction.—1. *Seams.*—The sides of the garment can be joined by (a) run-and-fell seam; (b) counter-felling; (c) Mantua-maker's hem; (d) bodice seams.

2. *Hems.*—Side hems should be fixed and hemmed first, and the hems should not be less than 1 inch wide, nor more than 1 $\frac{1}{2}$ inches. The bottom hem can be very deep if liked, from 2 to 3 inches, or only 1 inch. The hems at armhole, if taken from the sleeve itself, must of necessity be narrow. They should be strengthened at the top of the seam by a strengthening tape, or by buttonhole stitches. A false hem on the cross is sometimes preferred for the sake of strength; it should not be more than $\frac{1}{2}$ an inch wide.

N.B.—Muslin hems must have the first turning as deep as the second, so that the ravelled edge shall not show through the material. The strings should have hems of $\frac{1}{4}$ inch. Sometimes they are made narrower still.

3. *Neckbands.*—The fulness of the front of pinafore at the neck may be simply gathered into the band, leaving about 1 $\frac{1}{2}$ inches plain from each armhole, or it may be pleated or tucked, the tucks being graduated in length

waistband must be put on the wrong side of the front over the gaging to still further strengthen this part, which is often strained, when tying the strings. The waistband must at least be 16 inches long, and may be 20 inches long if it extends from side seam to side seam. If it is 16 inches long, there must be a plain space of 2 inches between each end of it and the side seams.

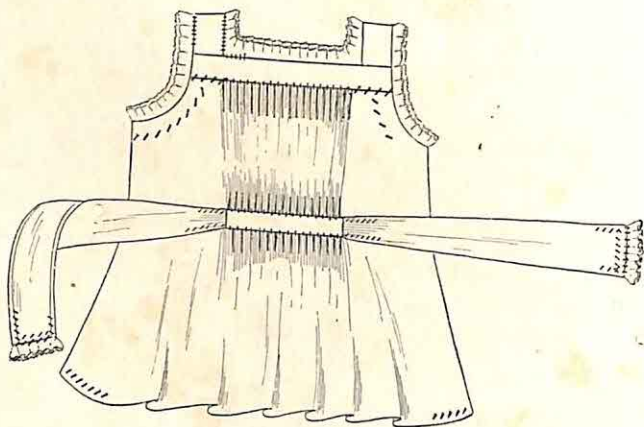


FIG. 164.*

5. *Shoulder Straps*.—These must be made of double material, and can be fixed and seamed on the right side, and the seam flattened, so that it lies in the middle of the strap, and be considered the under or wrong side of it. The straps can be seamed to the edge of the neckbands, or the neckbands can be laid over them, and stitched on the right side, and felled on the wrong.

6. *Strings*.—These should be wide, and a good length to allow of tying in a bow. They can be pleated on the top

* This pinafore is often made up without a waistband and strings. The sides of the pinafore may be kept quite straight, to make the garment fuller at the neck and under the arms.

of the waistband, or placed under the waistband, or put in with the seams. When they are put under the waistband the latter is finished off at the ends with points, and felled or stitched through all the thicknesses.

7. *Trimming*.—If lace edging is used, it must be drawn up to the fulness required, and sewn to the edges of the neckbands, shoulder straps, and armholes, on the wrong side and well flattened. If everlasting edging is used, it must be felled to the wrong side of bands, and the edges of bands stitched or feather-stitched to it. If embroidery is used, it can be whipped and sewn on the wrong side like a frill; or it can be placed between the bands and straps, which are divided into two parts, as described in trimming chemise sleeves and neckbands, etc. The embroidery is put on with less fulness than lace. The bands may be still further ornamented by feather-stitch, or may be made of embroidery insertion. The strings should be trimmed round the ends, and a piece of embroidery can be placed on the waistband, over the gathers, and then should be fastened down with the waistband by felling, stitching, or feather-stitching.

8. *Button and Buttonhole*.—The buttonhole must be cut with the selvedge on the right arm back band, and be large enough to fit a pearl button of moderate size. The button must be sewn on the left arm back band, a little distance from the end. If the bands are made of insertion, a buttonholed loop must be worked at the end of right back band for the button.

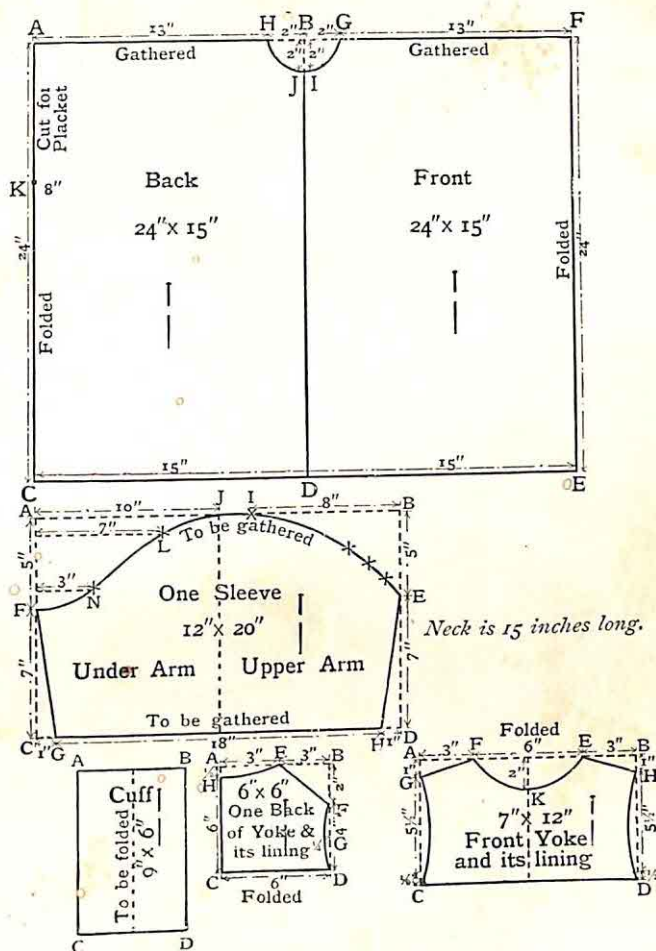


FIG. 166.—GIRL'S YOKED OVERALL (6 to 7 years old).

1. The Front Yoke may be 6 inches deep, like the Back. From B to H and A to G should be $1\frac{1}{2}$ inches. From B to F in the Back Yoke should be $1\frac{1}{2}$ inches instead of 2 inches (Fig. 166).
2. Fig. 165 can be made up as an Overall Pinafore. Sleeves are then made by two pieces of the material, each 18 inches wide and 4 inches deep, and gathered or pleated, and set into Armholes of Yokes. The Backs are left open, and are hemmed at edges.

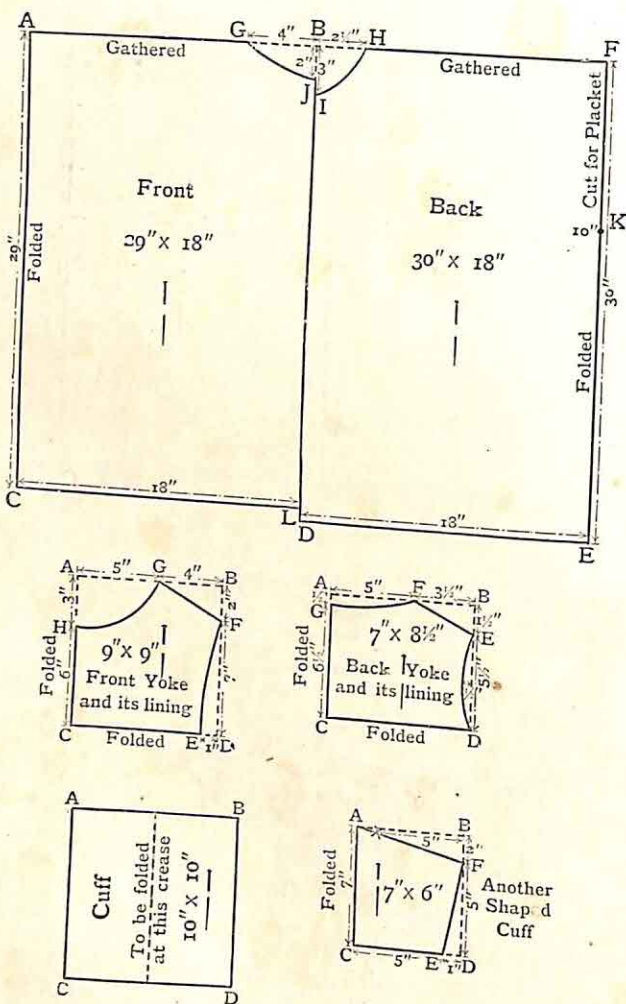


FIG. 167.—GIRL'S YOKED OVERALL (10 to 12 years old).*

* The shoulder of the Front Yoke from G to B may be 3½ inches. If 4 inches, the extra ½ inch must be cut off at the armhole (Fig. 167).

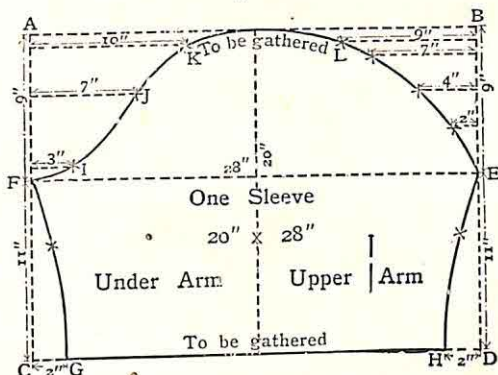


FIG. 167 (continued).

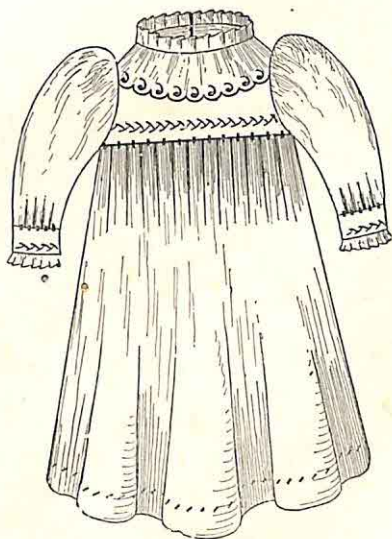


FIG. 168.—FINISHED APPEARANCE OF YOKED OVERALL.

CHAPTER V

WOMEN'S AND GIRLS' APRONS—PILLOW-SLIPS, AND
TAPE LOOPS

APRONS (*Cooking and Dusting*), Figs. 169, 224, 225, 226

Suitable Materials.—(a) Linen yarn, French linen, Holland, Galatea, good stout Zephyr.

Quantity.—This must depend upon the width of the material used, the length of the garment, and the style in which it is made up. The simplest style is a skirt pleated into a narrow waistband, and the quantity needed for this is 1 yard of Holland or Yarn, 36 inches wide. An apron with a bib and a pocket will require $1\frac{1}{4}$ yards of 36 inch material, while an apron made with a front breadth, two side gores, pocket, bib, waistband, and shoulder straps will take 3 yards of 30-inch material. If Holland is less than 36 inches wide, a breadth and a half, 1 yard long, will be needed for the skirt, so that it will be more economical to cut two at one time, and three yards will give the two skirts and waistbands, but no bibs or pockets.

Method of Cutting-out.—*The Skirt.*—(a) Cut off 1 yard of yarn; (b) take from this breadth a strip 3 inches wide and 36 inches long for the waistband.

The Bib.—(a) Cut off from the $\frac{1}{4}$ yard of stuff a piece 9 inches long, and 12 inches wide; (b) fold this piece into four parts down the length, creasing it well; (c) open it so that it is twofold, *i.e.* 6 inches wide; (d) crease from the top open edges down to the bottom in a slanting line to the quarter crease, and cut this piece of material off.

N.B.—The bib will be 12 inches wide at the top, and 6 inches at the waist.

The Pocket.—(a) Take a piece of material 9 inches deep, and 12 inches wide, and fold it half down its length, then into quarters, and then into eighths; (b) crease from the top open edges to the bottom in a slanting direction to the eighth crease, and cut this off. The pocket is 12 inches wide at the top, and 9 inches wide at the bottom.

Construction.—(a) Put a hem down the selvedge side with the raw edge and hem it; (b) fix a broad hem at the bottom and hem it; (c) hem the pocket on all four sides by narrow hems; (d) fix it to the apron to the right of the centre crease of the skirt, with its wrong side to the right side of the garment, and $\frac{1}{6}$ of the length of the skirt from the waist, and fell it neatly on three sides to the skirt; (e) make the waistband and seam the ends; (f) pleat the garment, so that $\frac{1}{4}$ of a yard of the waistband extends beyond the apron (these bottom open edges of the band must be seamed); (g) fell the band to the skirt of the apron, on the right, and then on the wrong side (see Lesson on Pleating); (h) hem the bib on all four sides by narrow hems; (i) place the centre crease of the bib to the centre crease of the waistband, right side to right side, and seam it strongly and securely to the band on the wrong side, flatten the seam; (j) fasten tape strings to each corner of the bib, to form shoulder straps, and to cross over at the back, and tie in front.

N.B.—The band is about 35 inches long, so that for a woman's waist of 27 or 28 inches there will be ample for fastening by buttons and buttonholes. If the band is shorter, tape strings must be sewn on, on the wrong side of the band.

Cost of the above—

$1\frac{1}{4}$ yards of Yarn or Holland at $8\frac{3}{4}$ d. per yard	0s.	11d.
Sewing cotton, tape, and button	0	1
	<u>1s.</u>	<u>0d.</u>

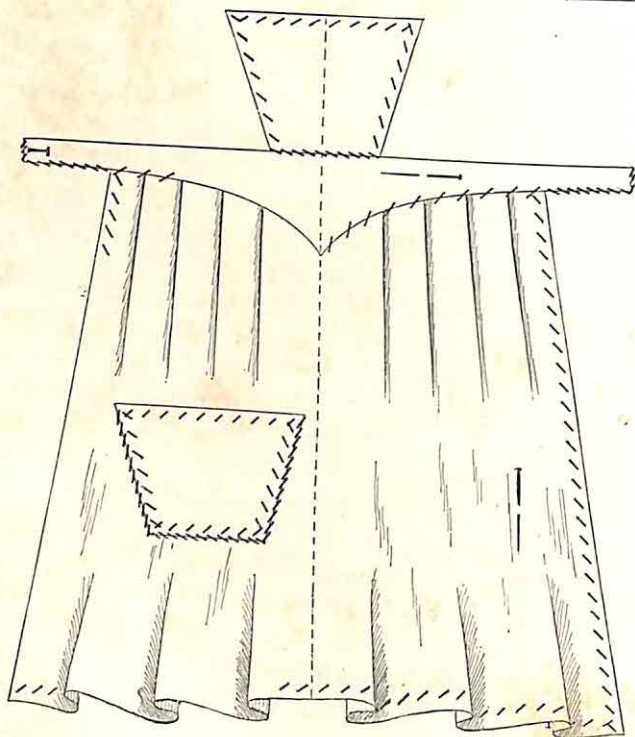


FIG. 169.

Another Method.—(Material 30 inches wide, *e.g.* French linen, or gray Zephyr.) (a) Cut off a breadth 33 inches long and 30 inches wide, and slope this from the bottom to the waist 2 inches on either side of the selvedge, so

that it will be 30 inches wide at the hem, and 28 inches at the waist; (b) take two more breadths 33 inches long, and 21 inches wide; (c) take each breadth and slope it, till it is 17 inches at the waist, and in such a way that the slanting sides shall face the slanting sides of the front breadth, and the straight sides will come to the back of the body; (d) join the side gores to the front by counter-hem, and hem or machine-stitch; (e) the outer straight edges, if selvedges, need not be hemmed, but if raw edges, fix rather wide hems, and the same at the bottom; (f) the bib and pocket may be shaped as described in the first method, or the bib and pocket may be made deeper and broader, and may be pleated or gathered at the bottom; the bib can be lined at the edges, by a broad false hem, which forms a part of the long shoulder straps, which cross and are joined to the bands on the back of the body by buttons and buttonholes.

N.B.—A very good fashion is to put on two pockets, one on the right side of the garment, and to the right hand, and one on the wrong side of the garment, to the left hand.

(g) The waistband should be 28 inches long and 1 inch deep, when doubled and fixed, and should be fastened by a button and buttonhole; (h) the two shoulder straps should each be 34 inches long and 2 inches wide, when doubled, and a buttonhole must be worked at each end.

N.B.—This includes the part of the straps, which line the vertical edges of the bib.

(i) The button on the band for the shoulder straps should be sewn $3\frac{1}{2}$ inches from the ends of the waistband; (j) the pockets should be placed over the side gores, beginning at the side seams.

N.B.—This is a very useful apron, but it takes more material than the first given, though the bands and straps can be got from

the pieces off the width of the side gores. $\frac{1}{4}$ yard of material is needed for the bib and pockets, and $2\frac{3}{4}$ yards for the skirt, bands, and straps.

Cost.—3 yards of Zephyr at 10d. per yard .	2s. 6d.
Cotton and buttons	0 1
	<hr/> 2s. 7d. <hr/>

FANCY APRONS

Suitable Materials.—Mull muslin or Nainsook, Yosomite, Hair Cord, Book muslin, Indian and Madras, Muslin de' Laine, and silk, *e.g.* Pongee, Chinese, and Tussore.

Quantity.—This kind of apron does not require as much material as a working apron. $\frac{3}{4}$ of a yard of wide muslin will give one, including bands, bib, and pocket. If the silk is 24 inches wide, and it is not considered wide enough for the skirt, a breadth and a half will be needed, besides extra for bib and pocket; the bands can be obtained from the half-breadth. It will be more economical to cut out two at a time. $2\frac{1}{2}$ yards of Tussore silk will cut two aprons.

Cost of one made of Muslin—

$\frac{3}{4}$ yard of Mull muslin at 1s. per yard .	0s. 9d.
Sewing cotton and flourishing thread and button	0 2
Trimming, $2\frac{1}{2}$ yards of lace at $2\frac{1}{2}$ d. per yard	0 6 $\frac{1}{4}$
	<hr/> 1s. 5 $\frac{1}{4}$ d. <hr/>

Cost of two made of Tussore Silk—

$2\frac{1}{2}$ yards of Tussore at 2s. per yard .	5s. 0d.
Sewing silk, and filoselle, and pearl or silk buttons	about 0 4
	<hr/> 5s. 4d. <hr/>

or 2s. 8d. each.

PILLOW-SLIPS AND TAPE LOOPS

Suitable Materials.—White and unbleached calico, white and unbleached linen, and Mull muslin.

Quantity.—The quantity must depend upon the size of the pillow, from $\frac{7}{8}$ to $1\frac{1}{2}$ of a yard in each, and the whole width of the stuff. Never less than two can be made at first. The greater number that are cut out at a time, the greater the saving of material must be.

Construction.—(a) Fix a narrow hem along one side of the width and neatly hem it; (b) put the wrong sides of the hem together, and then the selvedges, tack and neatly seam; (c) fix a hem from $1\frac{1}{2}$ to 2 inches deep at the top and neatly hem, being careful to match the seams.

N.B.—1. Pillow-slip material of varying widths and prices can be obtained, and is so woven as to dispense with the side seam, the bottom only needing the join, and the top the broad hem.

2. The bottom of the pillow-slip can be fixed for sew-and-fell, run-and-fell, German hemming, or counter-hem. If young children are entrusted with the fixing, a card measure should be given them, to enable them to fix the broad hem at the top as even as possible.

Tapes.—(a) Sew two sets of tape to the broad hem, one-fourth the width of the pillow-slip apart; (b) place these tapes just above the edge of the wide hem, and hem three sides, and stitch the tape across its width to the hem on the right side (Fig. 170).

N.B.—The tapes must fall outwards from the slip (Fig. 170).

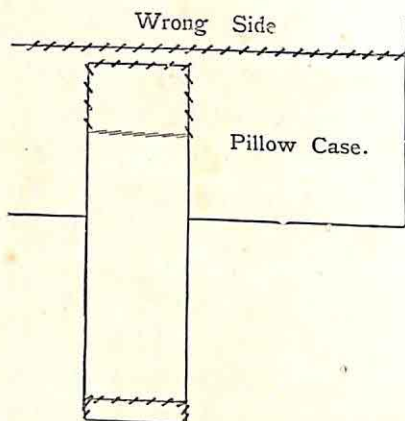


FIG. 170.

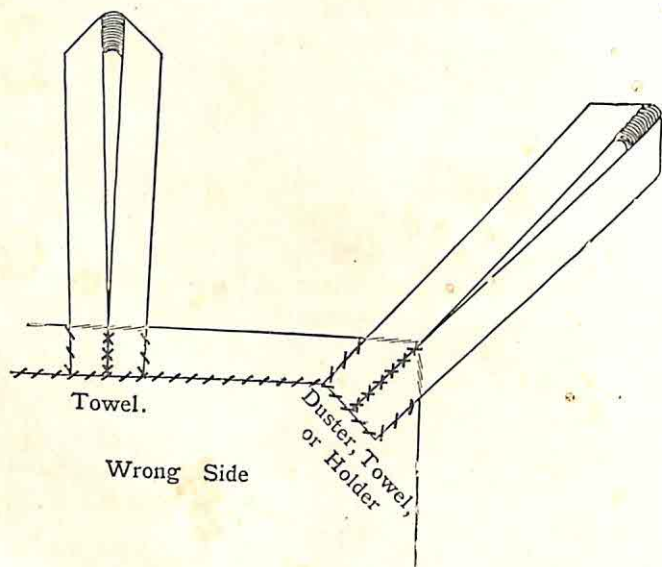


FIG. 171.

Or Buttons and Buttonholes.—(a) Work two buttonholes on the right side of the broad hem, just above the edge, and cut the holes with the woof of the stuff; (b) sew on two buttons exactly opposite the holes, on the broad hem and just above the edge.

Trimming.—Trim one side of the broad hem, the two selvedge sides, and the bottom edge with whipped Mull muslin or Nainsook frills, or wide Cash's cambric frilling.

N.B.—The frills should be from 2 to 3 inches deep, and should only be used for linen, or Mull muslin pillowslips.

CHAPTER VI

PETTICOATS AND SCALES

PETTICOATS (Figs. 228 and 229)

Suitable Materials.—(a) Flannel (Welsh or Saxony) from 8 $\frac{3}{4}$ d. to 1s. 8d. per yard; (b) Sanitary wool from 1s. to 1s. 7d. per yard; (c) Serge from 8 $\frac{3}{4}$ d. to 10 $\frac{3}{4}$ d. per yard; (d) Flannelette from 5 $\frac{3}{4}$ d. to 8 $\frac{3}{4}$ d. per yard; (e) Bath Coating, which is from 1 $\frac{1}{4}$ to 1 $\frac{1}{2}$ yards wide, and from 5s. to 9s. per yard.

N.B.—Cheap flannels are narrow, and are often mixtures of cotton and wool. Serge is very durable and useful for working

women's petticoats. Bath Coating is expensive, but it is most durable and warm. The above materials are used for the garment, which is generally called a *flannel petticoat*.

- (f) Long cloth from $6\frac{3}{4}$ d. to 9d. per yard, 36 inches wide ;
 (g) Zephyr at $8\frac{3}{4}$ d. per yard ; (h) striped Oxford shirting or Galatea at $7\frac{3}{4}$ d. per yard ; (i) Hair Cord at $6\frac{3}{4}$ d. per yard ;
 (j) Mull muslin at $8\frac{3}{4}$ d. per yard.

N.B.—These materials are used for women's and children's outer summer petticoats.

(k) Cloth, Woollen Mixtures, Felt or Batwing, Homespun, and Serge are used for women's and children's outer winter petticoats. Cloth is often sold in petticoat-lengths of $2\frac{1}{4}$ yards for a woman, and varies in price according to the quality and width.

Suitable materials for bands, whether straight or circular, are Calico, Turkish twill, Drill, Silesia, stout linen, or Jean.

Quantity.—The quantity depends upon (1) the height of the wearer ; (2) the width of the material ; (3) the number of breadths put into the garment. From 2 to 3 yards for women's different sizes, and from $\frac{3}{4}$ of a yard to 2 yards for children's various sizes. Circular bands require much more material than straight ones ; 1 yard of good stout calico would give eight straight bands for women's petticoats, whereas $\frac{3}{4}$ of a yard of material are necessary for two circular bands. $4\frac{1}{2}$ yards of flannel, 30 inches wide, will give two gored petticoats 27 inches long. A deep circular band must be added for a woman of a medium height, to make the garment long enough. Some persons prefer three breadths in a woman's garment, simply narrowing each side of the front breadth towards the waist. In this style the placket hole comes in the back seam. Children's flannel

petticoats require from 2 to $2\frac{1}{3}$ or $2\frac{1}{2}$ breadths, and they vary in length from 9 to 24 inches.

Cost of two Petticoats for a woman—

$4\frac{1}{2}$ yards of Welsh flannel 30 inches wide, at	6s. 0d.
1s. 4d. per yard	
$\frac{3}{4}$ yard of twilled calico at $8\frac{1}{2}$ d.	0 6 $\frac{3}{4}$
Sewing cotton, and linen buttons	0 1 $\frac{1}{4}$
	<hr/> 6s. 8d.

Cost of one, 3s. 4d.

N.B.—If the hem is scalloped and embroidered with wool or flourishing thread, from 6d. to 1s. more must be added to the cost.

Cost of two Serge Petticoats for a woman—

$4\frac{1}{2}$ yards of serge at $10\frac{3}{4}$ d. per yard	4s. 0 $\frac{1}{2}$ d.
$\frac{3}{4}$ " " unbleached calico at $4\frac{3}{4}$ d. per yard	0 3 $\frac{3}{4}$
Sewing cotton, and bone buttons	0 1
	<hr/> 4s. 5 $\frac{1}{4}$ d.

Cost of one, 2s. 2 $\frac{3}{4}$ d.

Cost of two Summer Petticoats for a woman—

$6\frac{3}{4}$ yards of long cloth at $7\frac{1}{2}$ d. per yard	4s. 2 $\frac{3}{4}$ d.
Sewing cotton, and linen buttons, or tape	
strings, about	0 1 $\frac{3}{4}$
	<hr/> 4s. 4 $\frac{1}{2}$ d.

Cost of one, 2s. 2 $\frac{1}{4}$ d.

N.B.— $6\frac{3}{4}$ yards allow of material for the circular bands, and for hem and tucks.

Cost of a child's Flannel Pettiecat—

1 yard of soft cream Saxony flannel at 1s. 6d.	
per yard	1s. 6d.
Sewing cotton, buttons, and calico for the band (the latter a strip left off some other garment)	0 1½
	<hr/> 1s. 7½d.

Cost of one Serge Petticoat (larger size)—

1½ yard of serge at 10¾d. per yard . . .	1s. 3¼d.
Sewing cotton, buttons, and waistband . .	0 1¼
	<hr/> 1s. 4½d.

Cutting out two Flannel or Serge Petticoats.—(a)

Divide the 4½ yards into six equal lengths; (b) find the right side and the way of the nap in each breadth, and mark by pins; (c) set aside four breadths; (d) fold each of the other two breadths into halves, selvedge to selvedge, and fasten the edges by pins; (e) mark inwards from the open edges at B 3½ inches to E, and fold the double material in a slanting line from E to D, and mark the crease by pins; (f) cut from E to D through the double material, and then cut from A to C, thus obtaining two gores, from 11 to 15 inches wide at the bottom, according to the width of the flannel or serge, and narrower at the top by 3½ or more inches; (g) slope each front breadth, when folded into halves, from E to F, before making up the garment, or after the breadths have been joined together.

N.B.—The back breadths must be kept straight, and, as a rule, the whole width of the material should be used to make a warm, full garment.

(i) Cut the placket holes in the middle of the back

breadths one-third of the whole length of the petticoat, if circular bands are used, but more if straight bands; (j) cut out a paper pattern of the circular band (from diagram in Division B), measuring the size of the waist at the top of the band, and the size round the hips for the lower portion of the band (which must be made of double material); (k) straight bands must be made the size of the waist + $2\frac{1}{2}$ inches for fastening by buttons and buttonholes. Bands must be deeper for a slim waist, than for a stout one, and must always be made of double material.

Construction.—(a) Face the breadths of the flannel by placing right side to right side, with the nap falling downwards; (b) place the slanting side of the gores to the straight sides of the back breadth, beginning at the top, so as to make the edges for the hem a better shape, and fix the seam, as described in *joins in flannel*, being careful to hold the sloped side towards you, and not to stretch it any more than can be helped; (c) place the straight sides of the gores to the straight sides of the front, matching the nap and right sides as before; (d) turn up, on the wrong side, a rather deep hem, not less than 2 inches, and be careful to match the seams on the wrong side; (e) herring-bone the raw edges; (f) fix the placket hole (see Lesson on this) and herring-bone the hems; (g) fold the garment in half, matching the seams at the top and bottom, and fasten by pins, so as to be able to make the garment equal in length, then shape the front and side gores, to match the shape of the band.

N.B.—A stout figure always requires a deep slope in petticoats and skirts in the front breadth.

(h) Join the side and top edges of the band by run and back-stitch, $\frac{1}{4}$ of an inch or more from the raw edges, then turn it out to the right side, and fold under the raw

edges ; (i) pleat the garment so that the greatest fulness shall be in the back breadth (see Lesson on Pleating).

N.B.—Some people put the front and side gores into the band perfectly plain, but this causes the garment to cling too closely to the figure, and prevents free movement of the limbs. Pleats should be put into the front breadth and side gores, but the most fulness should be carried to the back.

(j) Fell the band to the garment, placing it quite $\frac{1}{2}$ or $\frac{3}{4}$ of an inch from the top edge, and after it is felled stitch

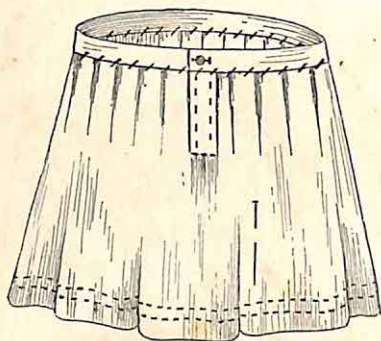


FIG. 172.—FINISHED GARMENT (Child's).

it to the garment a little above the felling ; (k) work not less than two buttonholes, on the right arm side of the band.

N.B.—These, if placed on a circular band, must be cut and worked on the crosswise material, and are more difficult to do, than any other kind of buttonhole. The raw edges of crosswise or diagonal holes should be braced by running stitches, on the right side, or the edges should be overcast from left to right, and the button-hole stitch worked over them.

(l) Sew on two linen or bone buttons, on the left arm side.

N.B.—Another method of fastening bands is by button and buttonhole just above the placket, and by *draw strings* at the waist.

Notes.—1. Calico skirts are sometimes made up without a



FIG. 173.—FINISHED GARMENT. (Woman's Gored Petticoat).

placket hole, if the waist is made long enough to go over the head and shoulders, and is drawn up by strings.

2. For placket, draw-strings, and *diagrams*, see chapters on *Folding Methods*.

SCALES FOR PETTICOATS (FLANNEL)

AGE.	LENGTH OF SKIRT.	NO. OF BREADTHS.	LENGTH OF PLACKET FOR STRAIGHT WAISTBAND.
3 to 5 years.	18 inches.	Two.	$\frac{1}{3}$ of whole length.
5 " 8 "	20 "	"	"
8 " 10 "	22 $\frac{1}{2}$ "	"	"
10 " 12 "	27 "	Two and a half.	"
13 " 15 "	28 "	"	"
15 " 17 "	30 "	Three.	"

Proportions.—Length of skirt, before being hemmed and tucked, should be half the height of the wearer.

Waistbands.—Size of waist, plus 4 inches for turnings and lapping, when quite straight, and 3 or 4 inches deep. Length for children and older girls varies from 24 to 28 inches.

Placket Hole.—One-third the length of back breadth with a straight waistband, and 9 inches long with a circular band.

CHAPTER VII

WOMEN'S CHEMISES—SCALES FOR WOMEN'S, GIRLS', AND CHILDREN'S CHEMISES

WOMAN'S CHEMISE (Figs. 174, 175, and 236)

Materials.—*For Working Women.*—Strong white or unbleached calico, flannelette. Other suitable materials

are Nainsook, Mull muslin, Indian longcloth, Sanitary wool.

2. **Quantity.**—The quantity required depends upon the height of the wearer, on the style of garment, and whether sleeves and gores are added, or not. A simple and economical way of obtaining gores is by cutting the chemise pillow-case fashion; if gores are put to chemises in any other way, more material is required. According to the given diagram, $2\frac{1}{4}$ yards will be ample.

3. Cost. — $2\frac{1}{4}$ yards of calico or Mull Muslin	
at $6\frac{3}{4}$ d. per yard	1s. $3\frac{1}{4}$ d.
$2\frac{1}{4}$ yards of Swiss embroidery at	
$4\frac{3}{4}$ d. per yard	0 $10\frac{3}{4}$
Cotton for sewing and feather-	
stitching, and buttons, if needed	
for front opening, about	0 $1\frac{1}{2}$
Cost of one	<u>2s. $3\frac{1}{2}$d.</u>

If whipped frills are used for trimming, $\frac{1}{8}$ yard of Nainsook at $6\frac{3}{4}$ d. must be bought; or Cash's frilling at 1s. 6d. per dozen yards; or everlasting edging, $2\frac{1}{2}$ yards, at $1\frac{1}{2}$ d. or 2d. per yard, may be substituted.

4. **Construction.**—(a) Before the seams are fastened up, some persons put shoulder straps from the neck across the shoulder to the armholes, when the sleeves are part of the garment. These shoulder straps may be felled on the wrong side of the garment, or stitched on the right side, and must be shaped to match the neck and armhole slopes.

(b) **Seams.**—If the garment is made of calico, Nainsook, or linen, fix for sew-and-fell seams, or run-and-fell, or for counter-hem, to be hemmed or stitched. If flannel, fix by one of the methods for flannel seams.

(c) *Hem* must be from $\frac{1}{2}$ to $\frac{3}{4}$ inch deep, to be hemmed on the wrong side.

(d) *Sleeves*.—The armholes are finished off by a false hem on the cross. If embroidery is used for the trimming, it may be put on so as to form a hem; or the embroidery may be placed between the false hem and the garment. Another method is to make a narrow hem from the sleeve itself.

N.B.—If the false hem is put on the wrong side, it is hemmed; if on the right side, it is stitched.

(e) *Neckband*.—An entire neckband may be put on, having no slit in front. The fulness in the front of the garment must be taken up by pleats, gathers, or tucks (the latter being graduated in length towards the sleeve), and neither must be carried far into the slope of the neck. The back must be pleated the same as the front, in a calico garment to be made up by young children, but in any other case must be gathered. Whether the garment is open in the front or not, a front fold should be put on in the centre, both for strength and ornament, and the tucks should fall towards the centre. A good rule for the length of the neckband is once, or once and an eighteenth, or once and a ninth, of the whole width of calico in the garment. For a medium height and figure the band is 36 inches long. It may be shorter or longer for a woman, according to the slope for a high or low-necked garment. The depth of the band, when finished, should be from $\frac{1}{2}$ to $\frac{3}{4}$ inch. More of the band is put to the front of the garment, than to the back. If the band is 36 inches long, the front should be, on its whole length, one inch longer than the back.

(f) *Trimming*.—If the neckband is trimmed with

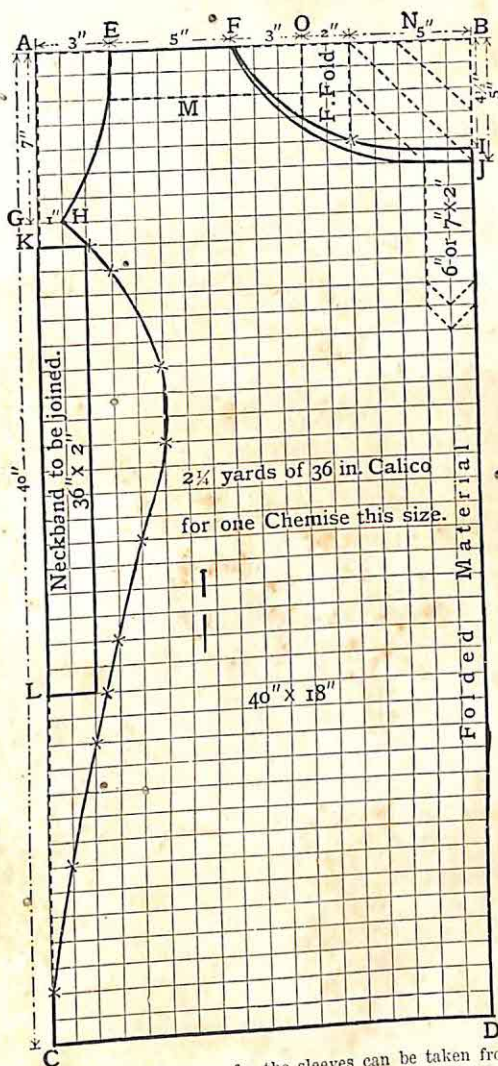


FIG. 174.—False hems on the cross for the sleeves can be taken from the neck-slopes. Front fold from sleeve slopings, or neck or side slopes. Shoulder straps, if used, from side slopes.

embroidery, the best plan is to make the band in two parts, and put the embroidery between these. Everlasting edging is felled to the wrong side of the band, and the edge of band is stitched or feather-stitched to it, on the

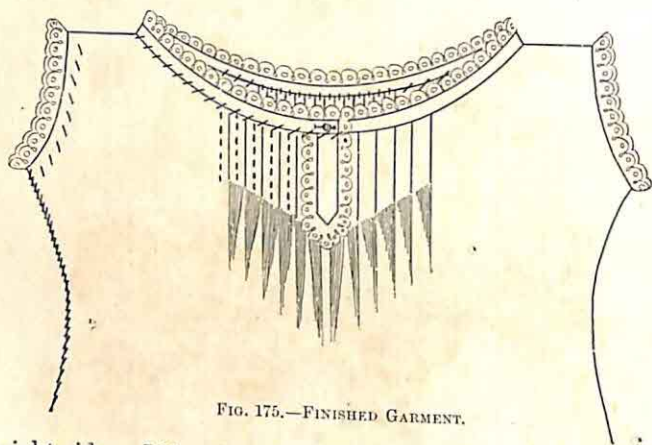


FIG. 175.—FINISHED GARMENT.

right side. If hand-made frills, or Cash's frilling, is used, it must be seamed on the wrong side.

N.B.—The tucks should be run.

(g) *Buttonholes*.—One is placed on the right-hand side of the band, and one on the front fold. The buttons are placed on the left-hand side of the band and on the hem. If neckband is made of insertion, a buttonhole loop must be placed at the edge of the band.

N.B.—See chapters on Folding Methods for other diagrams of chemises.

SCALES FOR CHEMISES—No. 1

Length.— $\frac{5}{8}$ or $\frac{2}{3}$ of the wearer's height.

Breadth.— $\frac{7}{8}$ of the length, but wider if gores are added.

Neckband.—(a) Length, as a rule = the breadth of the garment, or the band may be in proportion to the neck

curve $\frac{3}{4}$ or $\frac{2}{3}$ of its whole length; (b) depth from $\frac{3}{4}$ to 1 inch when finished.

Neck Slope.—(a) Depth in the front = $\frac{1}{8}$ of the length of the garment; (b) depth in the back, $\frac{1}{10}$ of the length.

Sleeves.—(a) Length: (1) Women's and girls' $\frac{1}{5}$ and $\frac{1}{6}$ of the length of the garment; (2) Children's, $\frac{1}{4}$ of the length; (b) depth, when cut apart from the garment, $\frac{1}{4}$ of its own length.

Slope of the Sleeve.—(a) At the top, when it forms a part of the garment = $\frac{1}{12}$ of the breadth; (b) slope under the arm = $\frac{1}{3}$ of the top slope.

Shoulders, including the sleeve, $\frac{1}{9}$ of the breadth of the garment, but when the sleeves are set in = $\frac{1}{6}$ or $\frac{1}{7}$ of the breadth.

Sides Slopes of the Body in the widest part = $\frac{1}{7}$ of the breadth.

NO. 2 (SMALL SIZES)

Length and Width.—A double square of material, half the height of the wearer.

AGE.	DOUBLE SQUARE.	AVERAGE HEIGHT.	NECKBAND.
3 to 4 years.	18 × 18	3 feet.	Differs in length; as
4 „ 5 „	20 × 20	3 „ 4 in.	a rule equals the
5 „ 6 „	22½ × 22½	3 „ 9 „	length of chemise
6 „ 7 „	24 × 24	4 „ 0 „	when folded.

N.B.—Width of shoulders, when sleeve is included, equals $\frac{1}{3}$ the breadth of the chemise.

CHAPTER VIII

CHILDREN'S AND WOMEN'S KNICKERBOCKERS—FALSE
HEMS ON THE STRAIGHT—SCALES FOR DRAWERS

A. CHILDREN'S CALICO DRAWERS (Fig. 176), CLOSED.

1.—Suitable Materials for Under Garment—

(a) *Calico*, unbleached and white, from 4½d. to 7½d. per

yard; *Oxford skirting*, from $5\frac{3}{4}$ d. to $7\frac{1}{2}$ d. per yard; *Turkey twill*, from $8\frac{3}{4}$ d. to $10\frac{3}{4}$ d. per yard; (b) *Flannel*, white or coloured, from $10\frac{3}{4}$ d. to 1s. 2d. per yard; *Flannelette*, from $4\frac{3}{4}$ d. to $6\frac{3}{4}$ d. per yard.

2. Suitable Materials for Outer Garment—

Cricketing Flannel, from 1s. 6d. per yard; good *serge*, single width from 1s., double width from 1s. 9d. per yard; *holland*, from $10\frac{3}{4}$ d. per yard; *French linen*, from 1s. per yard; *duck*, a very strong material used in sailor suits, from $9\frac{3}{4}$ d. per yard.

3. (a) Quantity of Material required for one pair—

This must depend upon the size of the garment and the width of the material used. In making up a pair of calico drawers for a child of five years, $\frac{7}{8}$ of a yard of material must be bought, and, if it is 36 inches wide, some material will be left off the width, after the bands have been cut.

(b) Quantity for half a dozen pairs—

Five yards of 36-inch calico will give six pairs of drawers for a child of five years, making the garment 15 inches long and 23 inches wide, and all the bands and false hems without joins, and sufficient material will be left off the width to make a pair for a child between two and three years of age. Six pairs of drawers, the same size as Fig. 176, would require $5\frac{1}{3}$ yards of 36 inch material.

4. Cost of half a dozen pairs—

5 yards of 36-inch calico at $4\frac{3}{4}$ d. per yard . . . 1s. 11 $\frac{3}{4}$ d.

$5\frac{1}{2}$ „ embroidery for leg-bands at 3d.
per yard

Sewing and crochet cotton 1 4 $\frac{1}{2}$
about 0 4

3s. 8 $\frac{1}{4}$ d.

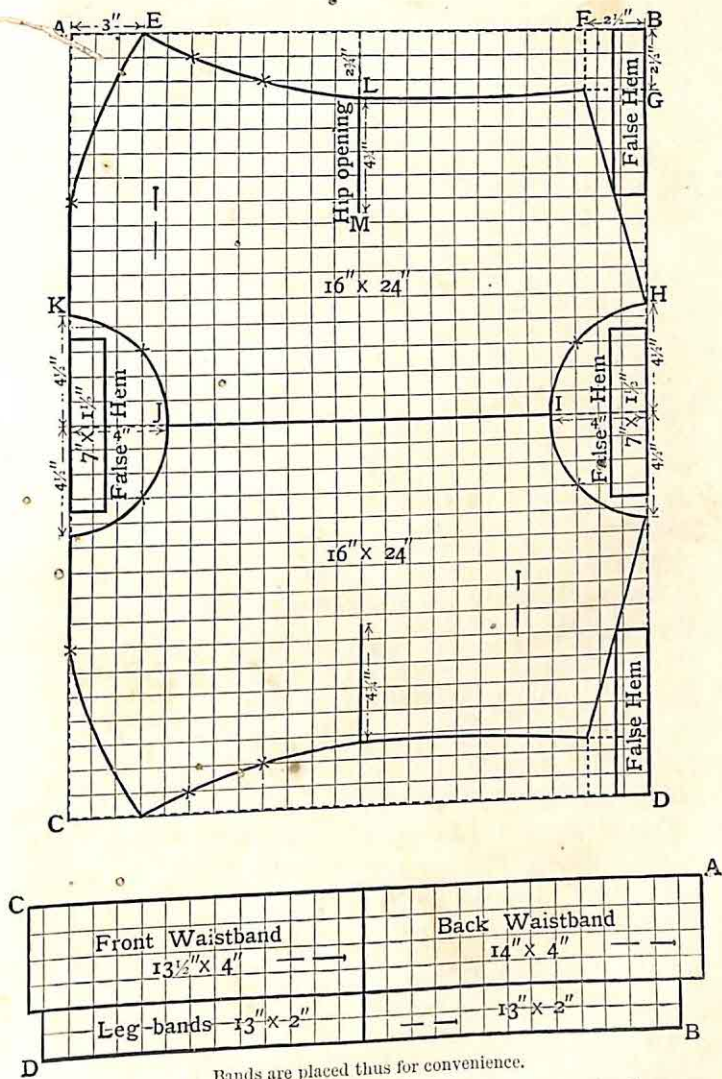


FIG. 176.--CHILD'S KNICKERBOCKER DRAWERS (5 to 6 years of age).

Cost of six pairs, with sufficient material over to make a smaller pair, 3s. 8½d.

Cost of one garment about 7½d.

5. Construction of Calico Garment—

Seams.—(a) Sew-and-fell; (b) run-and-fell, if rather fine calico; (c) Counter-hem, or German hemming. The seams may be made in the following order: the backs should be joined first, then the fronts, then the legs; the back and front seams being matched, when the legs are joined.

N.B.—Some prefer to join the leg seams first, but this is not such a good method with what are called *closed drawers*.

Hip-openings.—(a) These may be finished off by narrow hems from the garment itself, and strengthened at the ends of the slits by gussets, or strengthening tapes, the latter being still further strengthened by buttonhole-stitch at the corner of the slits; (b) the strongest method is, however, by putting on false hems on the straight, and these should be 1½ inches longer than the slit itself, for the purpose of strengthening the part below, and should be buttonholed at the corner of the slits.

Leg-bands.—(a) The leg portion of the garment may be pleated or gathered into the bands; (b) measure from the leg seams inwards 1 inch (or 1½ inches); (c) mark these distances by pins, then fold the remainder into half and crease; (d) and explain and show that the whole has really been divided into quarters; (e) put in stitches at these quarters.

N.B.—The inch (or the inch and a half) is left ungathered to prevent the garment twisting, when it is worn.

(f) Pin the middle of band to the seam, and to the inch on either side of seam, then divide it into halves and quarters,

and mark the divisions, so that when the gathers are set in, the fulness can be properly regulated ; (g) tack the band on, and fell it to the two inches of plain material ; (h) the edge of the band can be simply stitched or feather-stitched, and left untrimmed, if preferred.

N.B.—The joins in the leg-bands must be placed at the seams of the leg.

Trimming.—(a) If trimmed with whipped muslin or embroidery frills, the frilling must be sewn to the edge of the band, on the wrong side, the joins matching the joins in bands and seams ; (b) if trimmed with everlasting edging, this kind of trimming must be felled on to the wrong side of band, slightly full, and the edge of the band stitched or feather-stitched to the webbing, near the pattern ; (c) if embroidery is not whipped, it must be placed between the bands, which are then divided into two parts (see Lesson on Trimming Sleeve of Chemise), and the embroidery pleated and tacked to one part, while the other part of band is placed on the top, and all three thicknesses run and back-stitched together.

Waistbands.—(a) Leave about one or two inches plain on either side of the *hip-hems* ; (b) divide the remainder and mark the divisions ; (c) place the bands over the *hip-hems* and plain portion, then divide the bands into halves and quarters, and fix the gathers into them, regulating the fulness by the divisions.

N.B.—Many people prefer the greater amount of fulness at the back of the garment to fall equally on either side of the centre seam, while others spread the fulness out to the hems. The garment fits more comfortably if the greater portion of the fulness is placed about the middle of the back-band, while the fulness of the front of the legs is better, if placed half-way between the centre seam, and the plain portion near the hems.

(d) The bands must be felled over the hip-opening hems and the plain portion, and then the gathers properly set in.

N.B.—Some stitch the top edges of the bands to make them firm.

Buttonholes.—There are five needed, one at each end of each band, cut with the selvedge of the stuff, and large enough to go over a moderate-sized bone, or linen, or pearl button, which will be sewn on to the child's stay-bands, and one in the middle of the *front* band, cut with the woof of the stuff, the round corner, if used, being near the top edge of the band.

B. CHILDREN'S FLANNEL OR FLANNELETTE DRAWERS (Fig. 177)

1. *Seams.*—As for flannel petticoat, or fixed for counter-hem, and stitched at each edge, on the right side of the garment.

2. *Hip-openings.*—(a) These may be finished off by hems taken from the garment itself, herring-boned and strengthened at the end of the slit by a tape or gusset; (b) or by false hems of flannel, or Sateen, or Turkey twill, like the waistbands, which all match the flannel or flannel-ette in colour.

3. *Waistbands.*—(a) These can be made of Flannel-ette, or of good Sateen, Turkey twill, or unbleached calico; (b) the material of garment must be managed as described above, only instead of gathering, the fulness must be pleated into the bands, and the bands properly matched in the divisions, and stitched at the edge over the pleats on the right side, and felled on the wrong side.

N.B.—Or felled on both sides, care being taken to prevent puckering the bands.

4. *Leg-bands*.—(a) The edge of the legs may be scalloped (see Lesson on Scalloping), and worked with embroidery stitch at the edge, and by raised dots in the centre of the

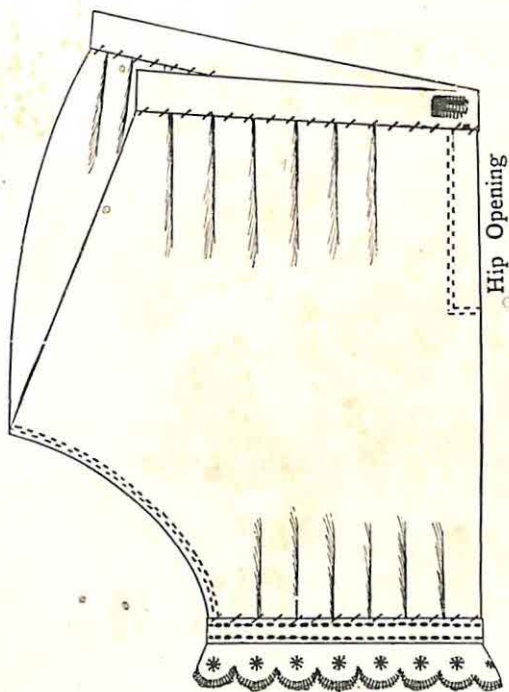


FIG. 177.

scallops; (b) from 1 to 2 inches from the edge of the scallops, pleat the fulness to the length of the leg-band which is required, leaving, as in the calico garment, a piece plain on either side of the seam; (c) tack the pleats, then lay over them on the right side the leg-band,

which must be made of single material, the raw edges being turned in once; (d) tack the band as evenly as possible, and stitch, or fell it, on either side to the leg; (e) ornament the leg-bands by a row of feather-stitch along the middle of them.

N.B.—1. If the embroidery forms a part of the leg, then the legs must be cut a little longer at first.

2. If, however, the fulness is pleated into a band, the trimming may be flannel embroidery, * placed between the edges of band. This is a longer method, and more bulky than that given above, and the legs must be cut shorter at first.

5. *Buttonholes*.—These would be the same in number, and would be placed in the same position, as in a calico garment.

Cost of One Garment for a Child of Five Years—

1 yard of flannelette	4 $\frac{3}{4}$ d.
Sewing-cotton	about 0 $\frac{1}{4}$
1 oz. wool, for embroidery and feather-stitch	2 $\frac{3}{4}$
Bands made of the same	
Cost of one	<hr/> 7 $\frac{3}{4}$ d. <hr/>

N.B.—1. If Sateen or Turkey twill be bought for waistbands, the addition to cost would be about 2d. more.

2. A flannel garment would cost about 1s. 3d.

* 3. Flannelette embroidery can be obtained.

OPEN DRAWERS

Girls generally begin to wear open drawers when they are about 9 or 10 years old. *Open drawers* are not cut down at the hips, and the band is made all in one piece of the material. The backs and fronts are not joined together, but hemmed separately. The fronts, in children's sizes, are seamed together for about 2 inches, in women's sizes a little more. A button and buttonhole are placed at the

ends of the band, or two^d tape strings. The legs are constructed as for closed drawers, *i.e.* as knickerbockers with bands, or with hem and tucks.

CUTTING-OUT AND MAKING-UP A PAIR OF CHILD'S FIRST-SIZED DRAWERS (Fig. 178)

Method of Cutting-out.—(a) Take a square of paper 24 inches wide, and fold it half-handkerchiefwise, from corner to corner; (b) lay the selvedge side BC (Fig. 178) to your right hand, and divide this into thirds across the woof, *i.e.* each division is 8 inches; (c) fold BC down its length towards the diagonal, to divide this portion into halves; (d) cut from E, that is a little below the first third, and curve inwards to the vertical crease, and outwards a little below the second third, *i.e.* to F; (e) divide the top third into halves across the woof, and slope off a little in a slanting direction from F to G; (f) then cut in a slanting direction to the vertical crease, *i.e.* from G to H; (g) fold the garment in a slanting direction from H to D, and cut this piece of material off, and the pair of drawers are cut out.

Method of Cutting out the Material.—(a) Fold in at one selvedge side of the material, the diagonal of 24 inches, and lay on it the paper pattern, the diagonal line of the paper being placed on the diagonal crease of the stuff; (b) pin the pattern, and cut the curve and slopes truly and evenly; (c) cut the band all in one piece, if possible 24 inches long, and 3 inches deep.

N.B.—Four bands can be got from the length and breadth of the piece of material left, after the garment is cut, if the calico is 36 inches wide. If the material is flannel, 28 inches wide, there will be *only* enough for one band.

garment, and must be gathered or pleated from D to I, which gives the fulness to the back of the garment; (*b*) line all the edges of the garment, except D to H, with narrow false hems, cut on the cross $\frac{3}{8}$ of an inch wide, when all turnings are taken, and neatly hem.

N.B.—If embroidery is used to trim the legs, place it between the false hems and the garment, rather full, from E to F. If whipped frills are used as trimming, sew these to the edges of the curves E to F.

(*c*) Sew a tape string $2\frac{1}{2}$ inches long at point C, and stitch it to the garment, on the right side, $2\frac{1}{2}$ inches inwards; (*d*) work two buttonholes, one at each corner E, placing a piece of broad tape on the single calico, so that the hole may be worked on double material, and two buttons at each corner F; (*e*) sew two tape strings 9 inches long at each corner G; (*f*) make the band in the usual way, and stitch it at the top edge, and stitch two parallel rows across it in the middle to form a string casing, leaving this portion of the ends of the band unfastened, to allow of draw strings.

N.B.—This garment can be easily put on and taken off. The strings at corner G are passed through the loop of tape at corner C.

Cost of Three Pairs—

2 yards of calico at $4\frac{3}{4}$ d. per yard	9 $\frac{1}{2}$ d.
3 yards of embroidery, or crochet edging · (or everlasting edging) at $3\frac{3}{4}$ d. per yard	11 $\frac{1}{4}$
Sewing cotton, tapes, and buttons	3
	<hr/>
	1s. 11 $\frac{3}{4}$ d.

Cost of one about 8d.

N.B.—The most suitable material for a baby's first sized pair of drawers is swan's-down calico, because it is so soft, and retains the heat.

FALSE HEM ON THE STRAIGHT

Use.—To form a lining as well as a hem, where a narrow hem would not be a sufficient protection to the edges.

Method.—1. (a) Compare the length of the false hems with the length of the slit on the garment, adding to this length $1\frac{1}{2}$ to 2 inches for (1) lining the garment *below* the slit, for (2) a turning to the hem, and for (3) shaping at the waist (drawers) or neck (chemise, nightgown, shirt); (b) illustrate on the slate the garment with a slit.

2. *Joining Two Strips to form the Hems.*—(a) The false hems should be cut into two separate strips, and should not be less than $\frac{3}{4}$ of an inch wide, when fully completed. To allow of turnings for hem and join at the slit, each strip must be from $1\frac{1}{4}$ inches wide for hip-opening of drawers, and wider if liked for chemises, nightgowns, and shirts; (b) place the two selvedge edges together quite evenly, and tack $1\frac{1}{2}$ inches at one end, about $\frac{1}{6}$ or $\frac{1}{4}$ inch from the edge; (c) run and stitch this $1\frac{1}{2}$ inches, or, as it is better to open this seam, stitch entirely for the sake of strength; (d) open the seam and flatten it well; (e) illustrate the joined strips.

3. *Fixing the Hems to the Slit of Garment.*—(a) Place the right side of garment uppermost; (b) lay the right side of false hem on the garment, placing the joined portion well below the slit, the edges being quite even; (c) tack the same distance from the edge to match the join in the false hems; (d) run and back-stitch both sides firmly, without puckering, as far as end of slit; (e) illustrate on slate; (f) cut the false hems at top to match the curves, or slopes in the garment.

4. *Fixing Hems on the Wrong Side of the Garment.*—(a)

Turn the false hems from the right to the wrong side of the garment, pressing the joined edges of the slit, and drawing over to the wrong side a small portion of the garment, so as to hide the join; (*b*) tack the edges of the slit; (*c*) turn down a fold on the selvedge sides first, then a fold at the bottom, and pull the false hems into a straight position, being careful to see that both are the same in width; (*d*) tack the hems quite straight and even; (*e*) illustrate hems fixed and tacked on the wrong side; (*f*) neatly hem; (*g*) finish off the end of the slit by a few neat buttonhole stitches, drawing any fulness on the garment towards the corner of slit; (*h*) illustrate the hem when finished on the wrong and right sides; (*i*) take out tacking cotton, and press firmly to make hems lie flat and smooth.

SCALE OF PROPORTIONS FOR CHILDREN'S DRAWERS

(*a*) *Length*.— $\frac{5}{9}$ or $\frac{1}{2}$ of the height of the wearer.

(*b*) *Breadth*.—This varies from $1\frac{1}{2}$ to $1\frac{2}{3}$ of the length for children under seven years of age, and from $1\frac{2}{5}$ to $1\frac{1}{4}$ of the whole length for children over seven years.

(*c*) *Length of the Leg*.—In the smallest size the leg = $\frac{1}{3}$ of the whole length, and in medium sizes $\frac{2}{5}$ of the whole length.

Examples—

Length of the garment 14 inches; length of leg $4\frac{1}{2}$ inches.

"	"	15	"	"	5	"
"	"	18	"	"	6	"
"	"	20	"	"	7	"
"	"	24	"	"	$9\frac{1}{2}$	"
"	"	28	"	"	11	"
"	"	30	"	"	12	"

(d) *Length of body* = $\frac{2}{3}$ or $\frac{3}{5}$ of the whole length.

(e) *Slope for the bottom of the leg*.—(1) Knickerbockers $\frac{1}{5}$ of the whole breadth of stuff in the garment. (2) Hem and tucks = nearly $\frac{1}{2}$ the breadth, when the leg is doubled, the slope of it would measure inwards $5\frac{1}{2}$ inches.

(f) *Slope at the top of the back* = $\frac{1}{8}$ of the whole breadth of the stuff.

(g) *Slope at the top of the front* = $\frac{1}{10}$ of the breadth.

(h) *Depth of slope at the top of hip* = $\frac{1}{5}$ of the whole length of leg.

(i) *Depth of slope at top of the front of leg* = $\frac{1}{10}$ of the whole breadth.

(j) *Length of the hip-opening* in children's knickerbockers = about $\frac{1}{3}$ of the length.

(k) *Length of the band* = size of the waist, and when made in two parts for closed drawers, 2 inches must be added for lapping, i.e. 1 inch on each part; otherwise the band = size of waist + 2 inches for buttoning.

(l) *Depth of bands* from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches wide.

SCALE OF PROPORTIONS FOR WOMEN'S DRAWERS

(a) *The whole length of the garment* = $\frac{5}{9}$, or $\frac{1}{2}$ of the wearer's height.

(b) *Breadth* = the length.

(c) *Length of the body portion* = $\frac{1}{2}$ the whole length.

(d) *Length of the leg portion* = $\frac{1}{2}$ the whole length for hem and tucks.

(e) *Slope for the bottom of the leg*.—(1) Knickerbockers = $\frac{1}{6}$ of the breadth, i.e. $\frac{1}{6}$ of the garment, when the leg is double. Legband is in length a little more than $\frac{2}{3}$ of the width of calico, before it is gathered.

N.B.—This gives plenty of fulness to the knee.

breadth of the back part of the leg, *i.e.* if 18 inches broad, $\frac{1}{4}$ of 18 = $4\frac{1}{2}$ inches.

(g) *Slope of the front opening of the body* = $\frac{1}{3}$ of the breadth.

(h) *Depth of the slope at the top of the front of leg* = $\frac{1}{6}$ of the length of the body, *i.e.* 3 inches.

(i) *Length of the band* = size of the waist + 2 inches for lapping, if the garment is fastened by button and buttonholes.

(j) *Depth of the band*.—2 inches deep when doubled, and turnings are taken, for a stout figure, and 3 inches deep for a slim figure.

N.B. — 1. The above proportions are for a garment with unshaped waistbands. If circular bands are used, the body of the garment must be *less* than half the whole length, in proportion to the depth of the band.

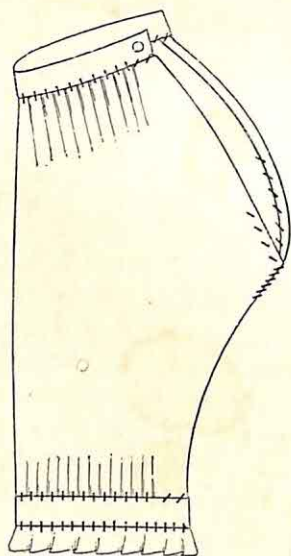


FIG. 180. — FINISHED GARMENT.

2. See Fig. 247 for front part of leg without any gathers.

CHAPTER IX

NIGHTGOWNS, AND SCALES FOR THE SAME

WOMEN'S AND CHILDREN'S NIGHTGOWNS (Figs. 181 to 186)

1.—*Suitable Materials*.—(a) Unbleached and white calico from $4\frac{3}{4}$ d. to $10\frac{3}{4}$ d. per yard, and from 34 to 36 inches wide; (b) Nainsook or Mull muslin from 36 to 40

width of the stuff, more material is needed than if one side is gored to make the garment wider at the bottom. Gores of $\frac{1}{4}$, $\frac{1}{3}$, or $\frac{1}{2}$ of a breadth are sometimes added to calico, as well as to flannel and flannelette, to widen the body of the garment. These gores may be

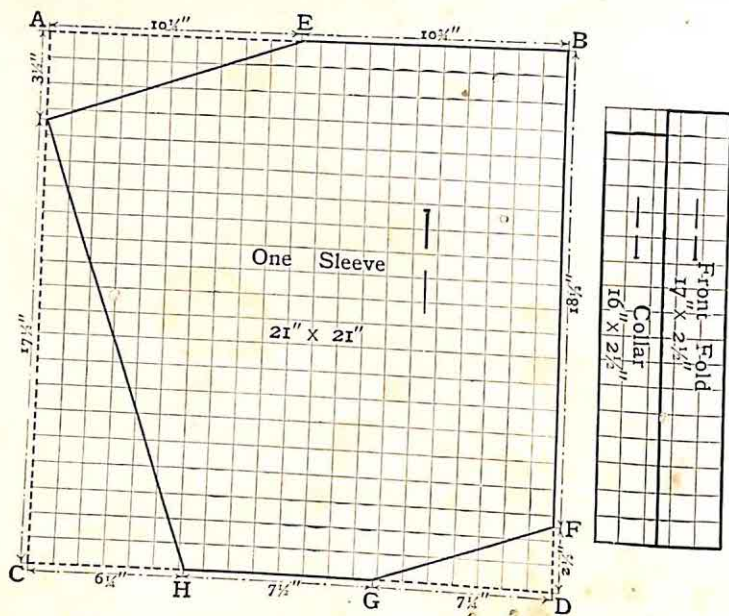


FIG. 182.—SLEEVE, ETC. OF WOMAN'S NIGHTGOWN.

joined to the whole length of the nightgown, or may be added at the sides underneath the armholes. It is more economical to cut out sets of two, three, four, or six nightgowns at a time, because there must be some saving of the material whatever style of construction is adopted. It is also advisable to use a good material for a nightgown, because it is a garment that requires more material than

the most of women's and girls' underclothing, and takes more time in cutting-out and making-up.

The quantity for one nightgown varies from 3 to $5\frac{1}{2}$ yards of Calico, Nainsook, or Flannel.

3. Cost.—(a) *Of a White Calico Nightgown—*

4 yards of white calico, 36 inches wide, at		
$9\frac{3}{4}$ d. per yard	3s.	3d.
Sewing and crochet cotton, and linen buttons	0	3
$\frac{1}{4}$ yard of Mull muslin at 1s. per yard for		
handmade frills	0	3
	<u>3s.</u>	<u>9d.</u>

N.B.—If trimmed with embroidery, the garment will cost 5s. 2d., viz. for $2\frac{1}{2}$ yards of embroidery at $6\frac{3}{4}$ per yard.

(b) *Cost of an Unbleached Calico Nightgown—*

4 yards of unbleached calico, 35 inches wide,		
at $4\frac{3}{4}$ d. per yard	1s.	7d.
Sewing cotton, and buttons	0	2
$2\frac{1}{2}$ yards of everlasting edging, at 1d. per		
yard	0	$2\frac{1}{2}$
	<u>1s.</u>	<u>$11\frac{1}{2}$d.</u>

(c) *Cost of a Flannel Nightgown—*

$5\frac{1}{2}$ yards of unshrinkable flannel, 27 inches		
wide, at 1s. 1d. per yard	5s.	$11\frac{1}{2}$ d.
Sewing and crochet cotton, and pearl buttons,		
about	0	3
	<u>6s.</u>	<u>$2\frac{1}{2}$d.</u>

N.B.—If the flannel garment is trimmed with flannel embroidery at $5\frac{3}{4}$ d. per yard, the cost will be more. Cash's frilling is a good substitute for handmade frills, and everlasting edging for

embroidery. Nainsook or Mull Muslin should be trimmed with muslin embroidery, or good lace of its kind, *e.g.* Torchon or Yak.

4. **Construction.**—(a) The plainest style nightgown is made with shoulder straps and neck gussets. Another style is with yoked back and tucked front, and buttoned either in the centre of the front of the garment or on the left shoulder. A third style is made with the saddle yoke, and a fourth with yoked back and yoke fronts; the latter being separated from the back yoke in cutting-out, and either put on quite plain, or ornamented with tucks and rows of insertion. (b) The following description applies to the making-up of the sectional diagram (Figs. 181 and 182).

(c) *The Seams.*—The sides of the garment are only slightly shaped. The seams can be joined by sew-and-fell, counter-hem, German hem, or run-and-fell, if the garment is made of calico or muslin; if a flannel or flannelette garment, the seams can be fixed as for a flannel petticoat, and then run and back-stitched, and herring-boned on the wrong side.

(d) *The Hem* should be 1 inch wide when completed. Care must be taken to match the seams when fixing the hem; a calico or muslin garment would be neatly hemmed; a flannel or flannelette garment could have a hem of one fold and be herring-boned, but it is preferable to turn the raw edge under, and back stitch on the right side.

(e) *The Binders.*—The front binder is always longer than the back one, when the garment is made up with the tucked front and yoked back. The binders must be shaped to match the curves of the armhole, and must be joined on the wrong side by run and back-stitch, so as to fit the curve of body under the armholes. Turn down a fold of $\frac{1}{4}$ inch on the inner curves, and lay the

wrong side of the binders to the wrong side of the armholes, and fell them neatly, being careful to fit the binders evenly at the top of the armhole, and to shape the front one to match the shoulder slope.

N.B.—Many people now dispense with binders altogether, and make the sleeves longer, and fix them to the armholes in such a way as to form a narrow border, or lining to the body. Binders are, however, necessary, because they strengthen the garment at the top of the side seams. They should not be very wide for this garment.

(*f*) *The Yoke*.—Crease the yoke down the middle at the back, and then crease the back body of the nightgown. Turn down a fold of $\frac{1}{4}$ inch, or more if necessary, along the straight selvedge side of the yoke. Pin the yoke to the body at the top of each armhole, then draw out the creased back body, and fold it towards the right armhole, in order to find out the exact place to begin gathering the fulness at the back of the body. By doing this, the rule of gathering twice as much as the length of the yoke can be carried into effect. When the gathers are quite ready for setting in, fix the yoke most carefully and smoothly on the back-body, being careful only to tack it at the armholes to the body, and not through the binders, and to place the centre crease of the yoke to the centre crease in the back of the garment, and to regulate the fulness properly. The yoke and body must be divided into halves and quarters for the gathers.

(*g*) *The Lining of the Yoke* must be fixed along the straight selvedge side, like the yoke, and then placed at either end on the binders and tacked to them only; the rest of the lining must be placed exactly on the gathering-thread, and set in as neatly, and with as much finish as the right side. The lining must not be taken above or below the gathering-thread and setting-in stitches of the

yoke, or it will be puckered. It must also match the yoke exactly at the slopes of the shoulders and at the armholes. When the gathers are completely set in, fix and tack the shoulder slopes and the armholes, to prevent the edges ravelling.

(h) *The Front*.—Some people tuck the front, before sloping the shoulders or shaping the neck, others shape these parts before the tucking is commenced. In the diagram given, the tucks are fixed from the neck point of the shoulder, and the shaping is done first. The tucks may be made in sets of three or five, with a corresponding width of space between them. When both sides of the front are tucked, and match each other in width, then the centre crease of the front must be managed for the opening or vent. If a front fold is put on, on the right arm side, and a hem is taken from the garment on the left arm side, the garment must not be cut on the centre crease, but as much to the right of it as will allow material for the hem, so that the sides of the neck shall be equal in size, and still allow of the front fold lapping, and the centre of this fold to be the centre of the neck; or if the garment is cut down the centre crease, a false hem can be put on the left side of the opening to fold back on to the right side of the garment, and should be stitched, instead of felled to the garment.

(i) *The Front Fold* must be placed on the wrong side of the right arm opening, and run and back-stitched a quarter of an inch from the edge, then turned over to the right side of the garment, the other long selvedge side being turned down once, and the edge at the bottom treated in the same way as described in front fold of chemise. Tack the fold to the garment, being careful to allow it to form the outer edge of the slit, and fell it, and

then stitch or feather-stitch it to the garment. The outer edge must be stitched or feather-stitched as well.

N.B.—The correct way of fastening a nightgown is right over left. The opening down the front should equal the length of the collar, but the front fold should extend quite an inch or an inch and a half below it. The fulness below the slit caused by lapping may be pleated or gathered, and fastened down by the point of the fold. If a front fold of insertion is put on, a wider hem is fixed on the right arm side of the slit, and the garment is cut as far as it is necessary to the *left* of the centre crease, in order to make both sides of the neck equal in width. The tucks must all fall towards the front fold, and they must be graduated in length towards the armholes. The front of the nightgown must be narrowed by the tucks, till each side is the same length as the shoulder slope of the yoke. The yoke must then be fixed to the front of the garment, on either side of the opening, and the yoke must be neatly felled to the tucked portions, the tucks being kept quite flat and smooth. The edges of the shoulder slope of the yoke are sometimes stitched or feather-stitched, after they are felled. The lining of the yoke must be carefully fixed over the shoulders of the garment, and must be neatly felled above the wrong side of the tucks and the stitches from the other side, and through the binders only. The lining of the yoke must lie perfectly smooth.

(j) *The Sleeves.*—(a) The sides of the sleeves must be joined by sew-and-fell seam, or any other method that has been used for the sides of the body; (b) the fulness at the wrist may be pleated, gathered, or tucked, according to the material of which the garment is made. A portion of the material on either side of the seam must be left plain, and the remainder must be halved and quartered and then *gathered*, if stout calico; *tucked*, if fine calico or Mull muslin; and *pleated*, if flannel. The crosswise material is the under half of the sleeve.

(k) *The Wristband.*—(a) The wristbands are usually closed up at the sides, by putting the two raw edges together, and joining them by run and back-stitch, then

flattening the seam, and turning it to the inside of the band, which is formed of double material; (b) the raw edges must be folded under firmly and neatly; (c) the

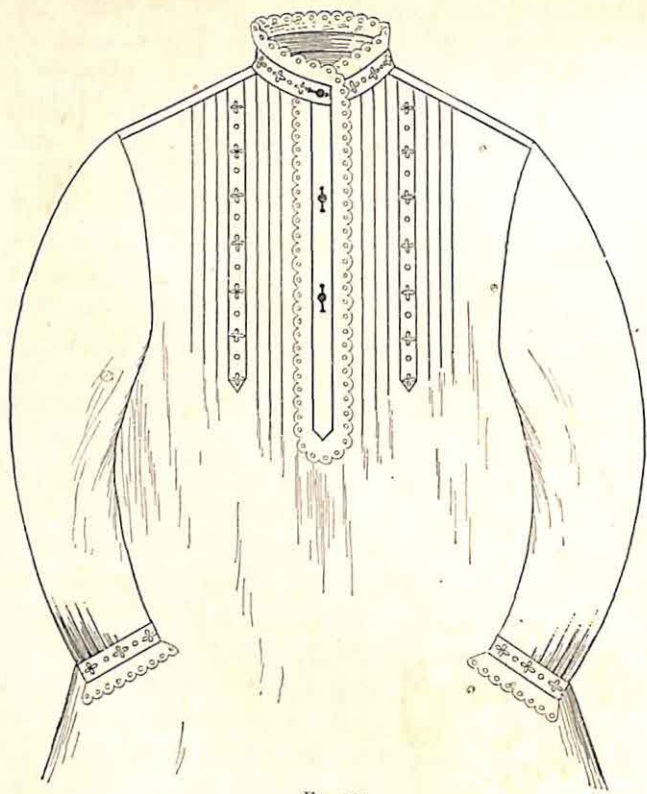


FIG. 183.

band must be divided into halves and quarters after placing the join to the seam of the sleeve and to the plain portions, on either side of the seam. The wristband is then neatly felled to the sleeve, and the gathers properly set in. The wristband is felled over the pleats and tucks,

and is usually ornamented with rows of feather-stitching, or, if an unbleached calico garment, it is stitched above the felling and also at the outer edge.

N.B.—Some prefer an *open* wristband with turned down cuff. The band is then fastened by buttons and buttonholes.

(*l*) *Fixing the Sleeves to the Armholes of the Body.*—(*a*) The seams of the sleeves must be placed between the body and the binders, and to the side seams, and tacked firmly and closely. If the sleeve is a little broader than the armhole, the fulness at the top must be gathered for a calico garment, and pleated for a flannel, and this fulness must be placed at the armhole portion of the yoke and carefully set in. The body armhole is thus fixed on the sleeve, and may be felled or stitched or feather-stitched. (*b*) The binders on the wrong side must be fixed to the stitches on the sleeve, and neatly felled. They must lie perfectly flat and smooth, and the felling must not be taken either above or below the stitches of the right side.

(*m*) *The Collar.*—(*a*) The neck portion of the garment needs skilful management. The neck slope in the sectional diagram is drawn higher than it must be when the garment is completed. It is always better to draw, and to cut out the neck slope in paper patterns higher than it must be, when the collar is fixed on, because the slope can always be cut deeper to correspond to the length of the collar, or the curves of the neck of the intended wearer, but if cut too deep at first, the collar must be made longer to remedy the evil, and the neck is out of proportion to the rest of the garment; (*b*) the selvedge sides of the collar must be fixed first, then the ends, which must be neatly seamed on the right side; (*c*) the collar should then be divided into

thirds, and about one-third fixed to the yoke portion of the neck, and a third to each side of the neck of the front ; (d) the collar should be fixed quite straight across the front fold and the left hem, and then carried *round* towards the shoulders ; (e) the collar must be felled to the

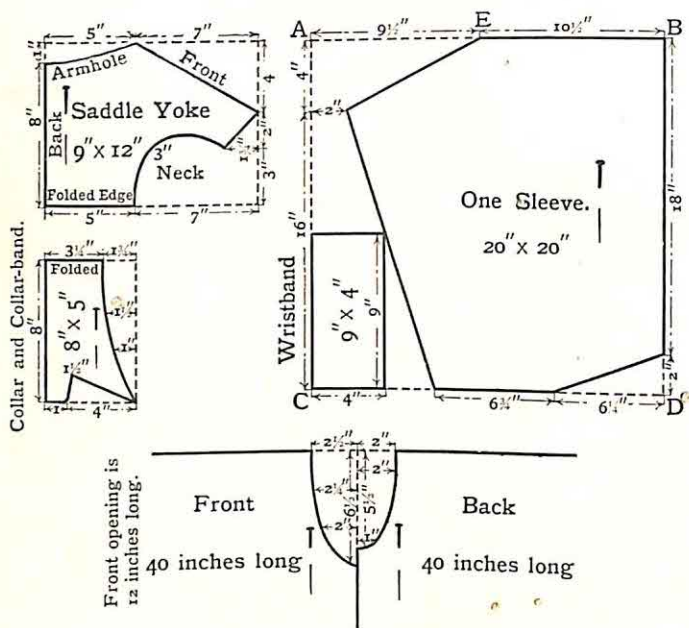


FIG. 184.—GIRL'S NIGHTGOWN (Saddle Yoke). (1) Three breadths of cream flannel-ette are required for the body. (2) The sides of the garment are straight.

neck on the right side, and then carefully felled on the wrong side, so that it lies quite flat and straight. The collar is ornamented by rows of stitching, or feather-stitching.

(n) *The Trimming.*—(a) The Mull muslin is cut into strips 1 inch deep, the selvages joined by ordinary seaming or German seam, one long side very neatly

hemmed, and then a length of the muslin is measured off to match the part of the garment to be trimmed, doubled if the frills are intended to be full, and then halved and quartered, rolled and whipped, and sewn on to the edge of the collar, wristbands, and edges of the front fold (see Lesson on Whipped Frills); (b) if embroidery trimming is used, it may be whipped at the edges like the muslin,

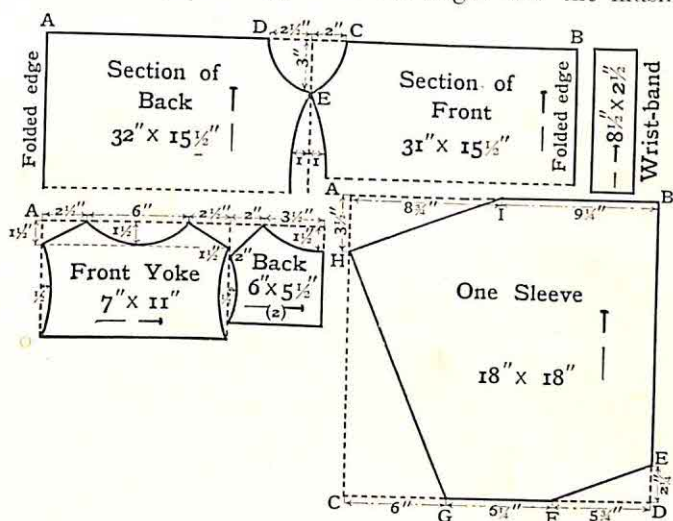


FIG. 185.—CHILD'S YOKED NIGHTGOWN.

only with less fulness, and sewn to the edges; (c) the embroidery may be placed between the edges of the collar and wristbands, which are then made in two parts, and between the front fold and the garment, the fulness needed being caused by gathering the plain material above the pattern (see Trimming a Chemise Sleeve); (d) if everlasting edging is used, it must be felled to the wrong side of the garment and *eased on*, the fulness being placed at the corners and points.

(o) *Feather-stitching and Knotting*.—The collar, wristbands, front fold, and the spaces between the sets of tucks can be ornamented in a pattern formed of feather-stitch and knotting.

(p) *Button and Buttonholes*.—One button and buttonhole will be needed for the collar, and two buttons and buttonholes for the front. The buttonholes must be worked on the right arm side, and the buttons must be sewn on the left. It is usual to cut the buttonholes the selvedge way of the material on the front fold as well as the collar. If the wristbands are open, two more buttons and buttonholes will be needed. If round corners are used, they must be placed at the end of the bands, and at the *top* of the holes on the front fold.

SCALE OF PROPORTIONS FOR NIGHTGOWNS

The scale for nightgowns may be built upon proportions agreeing either with the length of the collar, or with the height of the wearer, or upon both. The following scale is built partly upon the length of the collar, and partly upon the height of the wearer.

Length of the Nightgown may be either $\frac{6}{7}$ or $\frac{8}{9}$ of the wearer's height.

Breadth.— $\frac{2}{3}$ of the length, and more if gores are added.

Yoke.—(a) Length = $1\frac{1}{8}$ or $1\frac{1}{4}$ of the collar length.

(b) Depth = $\frac{1}{4}$ or $\frac{1}{3}$ of its own length.

(c) Length of shoulder slope = nearly $\frac{1}{2}$ of the collar length; depth of slope at the arm-hole portion of yoke = $\frac{1}{8}$ of the collar length.

(d) Slope of neck in width = $\frac{1}{4}$ of the yoke length; depth of neck slope = 1 inch.

Sleeve.—(a) Length = $1\frac{1}{3}$ of collar length.

(b) Width of the top is the same as the length.

(c) Width at the wrist = $\frac{2}{3}$ of the widest part.

Wristband.—(a) Length = $\frac{1}{2}$ the collar length + $1\frac{1}{2}$ inches.

(b) Depth = $\frac{1}{2}$ its own length, before it is doubled.

Armholes.—(a) Length = $\frac{1}{2}$ the widest part of the sleeve.

(b) Slope = $\frac{1}{8}$ of the collar length.

Binders.—(a) Length = same as the armholes + the width of the binders for lining the body below the armholes.

Slope of shoulder of body.—(a) Length = $\frac{7}{8}$ of the collar length.

(b) Depth of slope of armholes = $\frac{1}{8}$ of collar length.

Neck slope of body.—(a) Width when the garment is folded in half = $\frac{1}{12}$ of the breadth of garment.

(b) Depth of slope = a little more than the width.

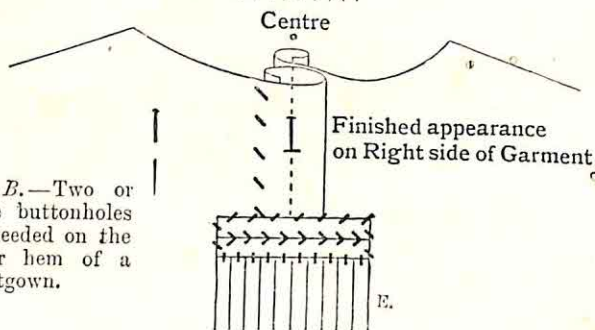
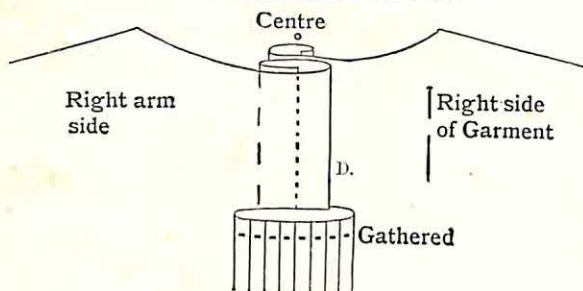
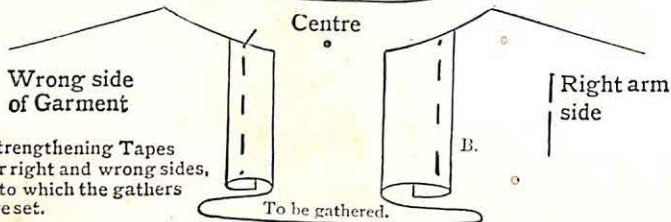
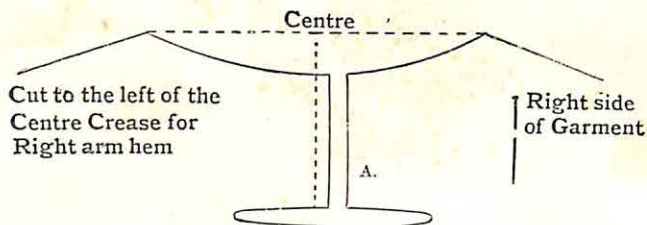
Front Fold.—(a) Length = same as the collar + $1\frac{1}{2}$ inches.

(b) Width = $\frac{1}{8}$ of the collar length + $\frac{1}{2}$ an inch for turnings.

Front Slit is usually the length of the collar.

N.B.—In these proportions all turnings are allowed for.

FRONT OPENING OF NIGHTGOWNS



N.B.—Two or more buttonholes are needed on the wider hem of a nightgown.

FIG. 186.

Note.—Front opening of chemises can be finished off in the same way.

CHAPTER X

DAY AND NIGHT SHIRTS—SCALES FOR SHIRTS

PLAIN DAY SHIRTS (Figs. 187, 188, and 189)

1. **Suitable Materials.**—(a) Oxford shirting from $5\frac{3}{4}$ d. to $7\frac{3}{4}$ d. per yard; (b) Longcloth from $5\frac{3}{4}$ d. to $8\frac{3}{4}$ d. per yard; (c) Flannel from $10\frac{3}{4}$ d. to 1s. 6d. per yard; (d) Flannelette from $4\frac{3}{4}$ d. to $6\frac{3}{4}$ d. per yard; (e) French Cambric from $9\frac{3}{4}$ d. to 2s.; (f) Cellular cloth from 1s. to 2s. 6d. per yard, 30 inches wide.

2. **Quantity.**—This must depend upon the length of the garment, and the way in which it is made up. Shirts with yokes require more material than those made with shoulder straps. The quantity of Oxford shirting, Flannel, or Flannelette needed for a man's shirt varies from 3 to $3\frac{1}{2}$ and 4 yards; and for a boy's day shirt from 2 to $2\frac{1}{4}$, $2\frac{1}{2}$, and 3 yards, according to height and sizes of collars. Some material can be saved, if a set of shirts are cut out at one time.

N.B.—If day-shirts are made of longcloth, 36 inches wide, less material will be needed, because the yokes, binders, collars, wristbands, false hems, and gussets can be cut from the pieces off the width of the stuff, after the body and sleeves have been cut out.

3. **Cost.**—(a) Man's Day-Shirt (15-inch collar)—

3 yards of Oxford shirting at $6\frac{3}{4}$ d. per	
yard	1s. $8\frac{1}{4}$ d.
Sewing cotton and pearl buttons	0 2 $\frac{1}{2}$
	<hr/> 1s. $10\frac{3}{4}$ d.

(b) 15-inch collar—

2 $\frac{3}{4}$ yards of longcloth at 5 $\frac{1}{2}$ d. per yard	1s. 3 $\frac{1}{4}$ d.
Cotton, and pearl buttons	0. 2 $\frac{1}{2}$
	<hr/> 1s. 5 $\frac{3}{4}$ d.

(c) 16-inch collar—

4 yards of flannel at 1s. 7d. per yard	6s. 4d.
Sewing cotton, and pearl buttons	0. 2 $\frac{1}{2}$ d.
	<hr/> 6s. 6 $\frac{1}{2}$ d.

Construction.—(a) *Seams in body and sleeves.*—Sew-and-fell, or fixed for a counter-hem and stitched on the right sides, or run-and-fell, if fine longcloth; run and back-stitched and herring-boned, if flannel. (b) *Hems*—At the bottom of the shirt body and side openings must not be more than $\frac{1}{4}$ inch wide in day shirts, and must be neatly hemmed. (c) The binders should be cut out by placing a piece of the material selvedge way on the front and back armholes separately, and shaping this material to correspond with the curve of the armhole and the sides of the body below the armhole, then curving the binders outwards for the proper width to match the curves of the armholes. (d) The binders must be joined by a run and back-stitched seam on the wrong side, for the portions which lie on the seams of the body. (e) Place the wrong side of the binders to the wrong side of the garment, the seams matching, and fell them on the wrong side.

N.B.—Some people prefer the binders on the right side of the garment; they must be stitched at the outer edges if so fixed. The front binder must be cut long enough to match the shoulder slope of the body.

(f) The yoke and its lining must be fixed to the back

of the garment in the same way as the yoke of a night-

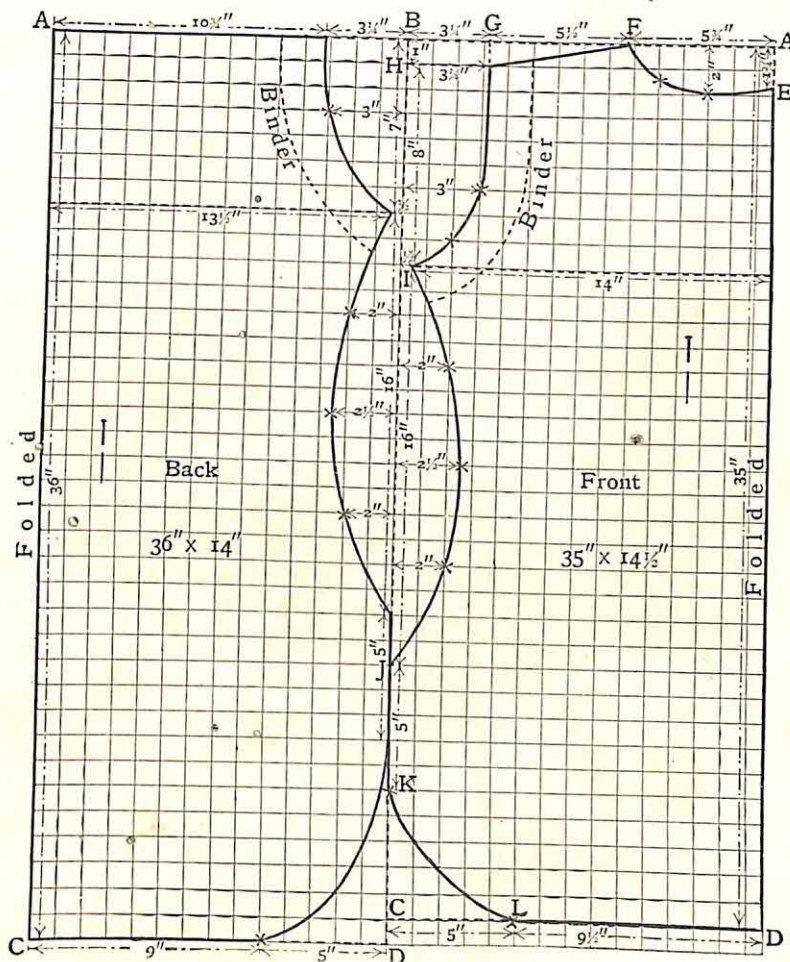


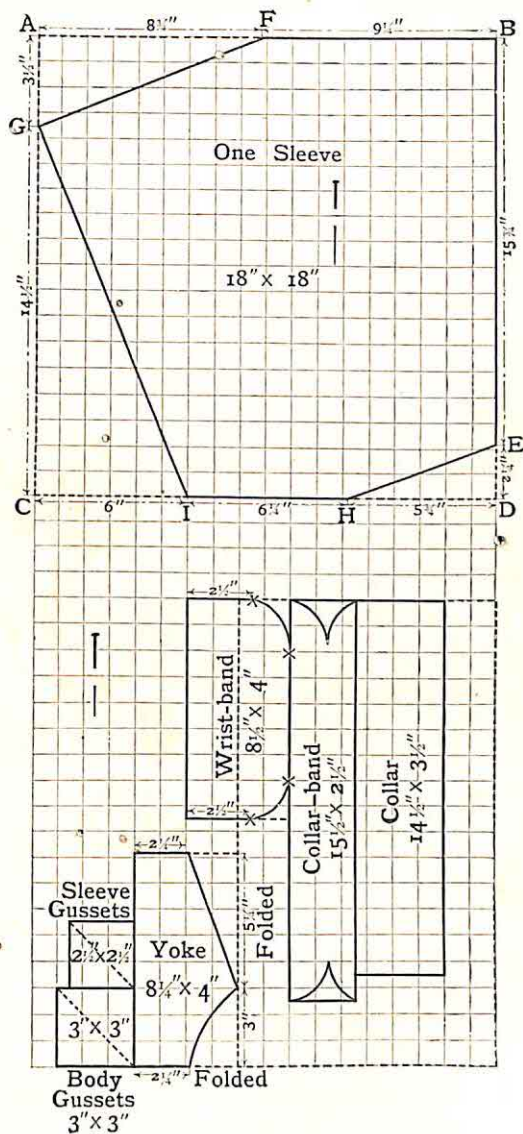
FIG. 187.—Boy's DAY OR NIGHT SHIRT.

gown (see Lesson on Constructing a Woman's Nightgown).
(g) The shoulder slope of the yoke must be fixed to

the shoulder slope of the front of the body, tacked, and either felled or stitched; the lining of the yoke at the armholes must be felled to the *binders only*, and then felled above the stitches from the right side. The back of the yoke may be stitched on the right side $\frac{1}{4}$ inch above the gathers. (*h*) The front opening of the shirt may be finished off by putting on a front fold to the left arm side, in the same way as a front fold is placed to a nightgown, or a chemise, only the end of the fold must not be pointed, but kept straight, and stitched across in two parallel rows; or, the left front opening may be finished off by a box-pleat, or by imitating a box-pleat, as described under night-shirts. (*i*) The right arm side may be finished off by a false hem, which extends beyond the edge of the body, and is stitched to the body on the right side of the garment, or by a hem taken from the stuff, if the width will allow of it. (*j*) The neck of the front of the body must be cut lower than it is drawn in the diagram. As a rule, the necks of men's and boys' day shirts are cut from 1 to $1\frac{1}{2}$ and 2 inches lower than the bottom edge of the yoke on the back of the garment. (*k*) The fulness of the neck, if little, must be gathered and set into the collar band; if fulness is sufficient, a box-pleat should be made on either side of the front opening, and the edges of the pleats should be stitched to the body of the garment. Great care must be taken not to narrow the garment too much across the chest.

N.B.—The bottom part of the front opening must be strengthened by a pointed tab of the material on the right side, and by a strengthening tape on the wrong side.

(*l*) The collar-band must be made in two parts, and must be shaped at the bottom from both ends towards the centre, by being curved outwards a little, and rounded at



N.B.—The collar-band, if necessary, may be 16 inches long. It must be folded equally into halves down its length, before being rounded at the ends.

FIG. 188.—BOY'S SHIRT SLEEVE, ETC.

the corners, and sloped inwards from the top. The back part of the collar-band is deeper than the front portions. A pearl or linen button must be sewn on to the middle of the band at the back, and another button must be sewn on the right arm end of it. The band must be stitched at the top edge below its own turnings if hand-sewn, or close to the edge, if machine-stitched. The two parts of the collar-band must be joined at the top and round the ends by run and back-stitch, and then turned out and stitched on the right side. Shaping the band in the way described makes it sit better on the neck of the shirt, as well as the neck of the wearer. If the collar-band is divided into thirds, a little less than one-third should be fixed to the back neck of the yoke, and the rest should be fixed to each side of the neck of the front.

Buttonholes.—One buttonhole must be worked at the left arm side of the collar-band, and must be cut with the selvedge, both ends may be braced; three buttonholes must be cut and worked on the left side of the opening, in the middle of the front fold or box-pleat, and must be cut the selvedge way of the stuff, and both ends braced.

N.B.—Buttonholes are placed on the right arm hem of opening, and are cut across the woof, and the ends are sometimes both rounded, when studs are used. The front fold and false hem of a plain day-shirt might be made of linen, when linen fronts cannot be afforded, and linen wristbands can be put on the sleeves.

Sleeves must be joined by a seam to match the seams in the body of the garment, and must be left open at the wrist for half the length of the wristband, to allow of the sleeve being moved up the arm, as well as for greater convenience in ironing the wristbands. Narrow hems must be put on either side of the wrist-opening, and a

gusset must be set into the bottom of the seams (see Fig. 87). The sleeves must be set into the body in the same way as sleeves of night-gowns and night-shirts, and the body should be stitched to the sleeves, on the right side. The crosswise material is the under half of the sleeve.

Wristbands.—The wristbands may be made straight at the ends in flannel or flannelette materials, or shaped if made of linen, longcloth, or Oxford shirting. Open wristbands must be stitched at the top and bottom, about $\frac{1}{4}$ of an inch from the edges. They must be divided into thirds, and the fulness of the sleeve must be gathered (or pleated if flannel), and set into the centre third, to give room for the elbow.

N.B.—Deep wristbands are worn on men's and boys' day shirts, and the ends are often straight, when fastened by studs.

Buttons.—The buttons are placed on the wristbands just above the gathers on the upper half of the sleeve, and the buttonholes are placed on the corresponding part of the wristbands, on the under half of the sleeves. Button and buttonholes are sometimes placed at the top part of the wristband when it is a straight shape, and another button and buttonhole are placed on the sleeve itself, close to the bottom part of the wristband.

Body-gussets must be set into the side seams, to strengthen them.

Notes.—1. Day shirts for working men and boys are often made open at the back instead of the front. The front of the shirt is then pleated at the neck into the collar-band, and a button is sewn on to the centre of the band in front. The back opening of the body is about $\frac{7}{8}$ of the collar in length, and is hemmed, while the collar-band and yoke are neatly finished off at the

edges by being stitched. The buttonholes are placed on the left side of the shirt, one on the collar-band and one on the yoke.

2. Another way of finishing off the wrist-opening on the sleeves is by straight false hems, which are folded over to the right side of the garment and stitched. The left side or under part of the sleeve is then folded over the upper part and stitched across the bottom in two parallel rows.

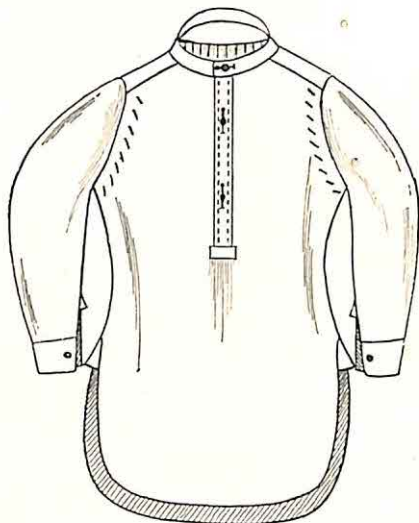


FIG. 189.—BOY'S SHIRT.

3. A good way of remembering the position of the buttons and buttonholes on the wristbands of the shirts is to recall the way in which women's gloves are fastened.

PLAIN NIGHT-SHIRTS (Fig. 190)

1. **Suitable Materials.**—(a) Good stout unbleached and white twill calico, from 4 $\frac{3}{4}$ d. to 9 $\frac{3}{4}$ d. per yard; (b) flannel, from 9 $\frac{3}{4}$ d. to 1s. 3d. per yard.

2. **Quantity**, for a man's night-shirt made in the simplest style with shoulder straps and neck gussets, will vary, according to the height of the wearer, from $3\frac{1}{2}$ to $4\frac{1}{2}$ yards of calico, 36 inches wide.

3. **Cost of one Night-shirt.**—(a) White Calico—

4 yards of Crewdson's calico, at $8\frac{3}{4}$ d. per yard	2s. 11d.
Sewing cotton and buttons about	0 2
	<hr/> 3s. 1d. <hr/>

(b) Unbleached calico—

4 yards of calico, at $4\frac{3}{4}$ d. per yard	1s. 7d.
Cotton and buttons about	0 1 $\frac{1}{2}$
	<hr/> 1s. 8 $\frac{1}{2}$ d. <hr/>

(c) Flannel—

$4\frac{1}{2}$ yards of flannel, at 1s. 1d. per yard	4s. 10 $\frac{1}{2}$ d.
Sewing cotton and buttons about	0 2
	<hr/> 5s. 0 $\frac{1}{2}$ d. <hr/>

N.B.—Boys' night-shirts require from 2 to $2\frac{1}{2}$ and 3 yards of calico, and vary in width from 27 to 34 inches.

4. **Method of Cutting-out.**—*Body of Man's Night-shirt.*

—(a) Cut off the required length for the body to suit the wearer's height, and fold the material across the woof, allowing 2 inches more to the back than the front; (b) crease the material into four equal divisions down the length (if the calico is 36 inches wide, each division will be 9 inches); (c) cut the centre crease of the front down the selvedge, either as long as the collar or 1 inch shorter; (d) cut along the folded top edge, on either side of the centre slit, to the creases, one-fourth of the whole width, and then the body is cut out.

Sleeves.—(a) Take a piece of calico 24×22 inches wide, if a man's nightshirt, and fold one of the selvages down to

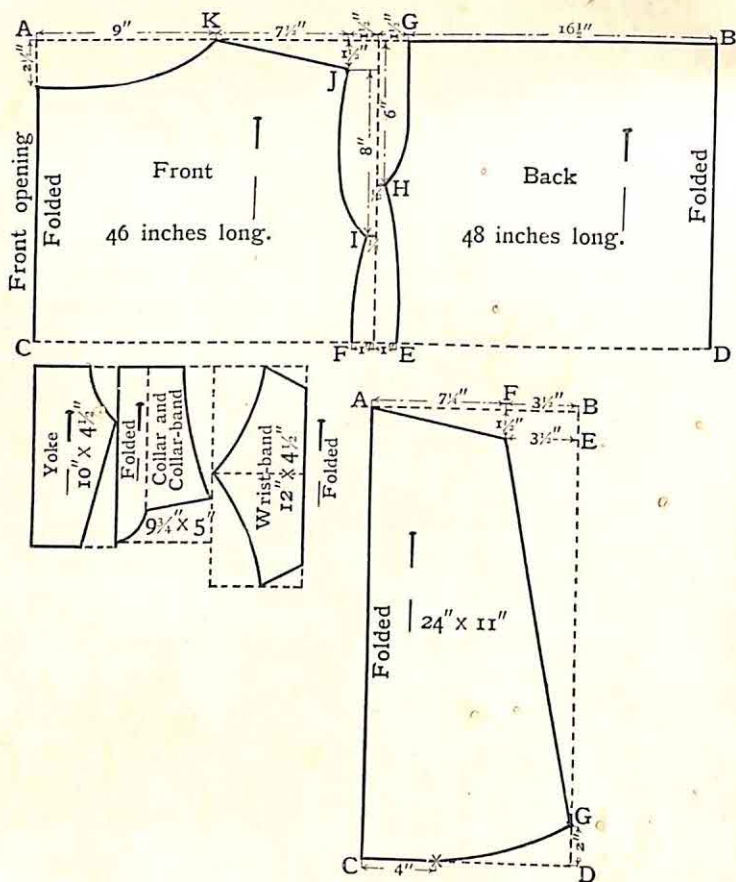


FIG. 190.

the opposite side in a slanting direction, so that the top measures on the slanting line $11\frac{1}{2}$ inches, and the wrist measures $\frac{2}{3}$ of the width of the sleeve, *i.e.* when folded,

$7\frac{1}{4}$ inches; (*b*) cut off the extra pieces at the top, side, and wrist; (*c*) the folded edge of the sleeve should measure down the length 21 inches, and the open edges 19 inches; (*d*) the selvedge of the material is the upper half of the sleeve, and the crosswise of the material is the under half.

Cutting two Sleeves out of the whole Width of Calico.—(*a*) Take the length required, and the whole width of the calico, and divide it down the selvedge into thirds, and crease well, or mark the thirds by pins; (*b*) crease the calico diagonally from $\frac{2}{3}$ at the top to $\frac{1}{3}$ at the bottom; (*c*) fold one selvedge side over to the diagonal crease, then turn the material to the other side, and fold the other selvedge over to the diagonal crease; (*d*) cut along the diagonal crease to divide the two sleeves, and then cut away the extra material at the top and bottom—the sleeves will be for the right and left arms, with the selvedges for the upper halves.

N.B.—This is a very economical method of cutting out shirt and nightgown sleeves; but sleeves so cut are apt to drag at the elbow, and are too narrow towards the wrist, so that, though they take less material in the first cutting-out than the first method given, they wear out sooner, and are not so large and comfortable. Flannel and Flannelette are too narrow to allow of two sleeves being cut out of the width of the stuff. If the material has a right and a wrong side, as in French cambric, two pairs of sleeves must be cut out at the same time, to make the sleeves right for both arms.

Wristbands.—(*a*) *Closed.*—These are preferable for night-shirts, and should be made large enough to allow of the hand going through easily. The size round the closed fist of the wearer with $\frac{1}{2}$ an inch for turnings is a good rule; (*b*) the length must be the selvedge way, and the depth should be, before being doubled, from $\frac{1}{2}$ to $\frac{2}{3}$ of the length.

The wristbands to suit the sleeve, 24 inches long, should be 12 inches long, and either 3 or 4 inches deep, when doubled.

Binders.—(a) These should be cut perfectly straight the length of the armhole (which is usually 10 inches for a man's night-shirt), and 2 inches should be added for lining the body below the armhole; (b) they should be in width half their own length.

Armholes.—These should be 10 inches long for a man's night-shirt.

Shoulder-straps.—These should be cut the selvedge way, 9 inches long, to cover the shoulder of the body from the armholes to the neck, and should be 2 inches wide.

Neck-gussets.—These should be not less than 3 inches square, and may be 4 inches if preferred.

Body-gussets.—Diagonals of a 3-inch square.

Gussets for Front Opening.—Diagonals of a 2-inch square (if they are used at all).

The Collar should be not less than 16 inches to a 36 inch wide calico in the body, and may be, to the same width calico, $17\frac{1}{2}$ inches long, and the depth from 2 to $2\frac{1}{2}$ inches when doubled, and all turnings are taken.

False Hems for the Front Slit.—(a) These must be quite 1 inch longer than the slit, and $1\frac{3}{4}$ inches wide when finished; (b) the bottom of the slit can be strengthened by a small gusset, instead of a strengthening tape.

Buttonholes.—Four are needed: one on the left end of the collar, and three on the left side of the false hem.

Slope of the Front of Neck.—In the above style of shirt, the neck-slope of the front is always very small, from 1 to 2 inches will be enough.

Side Opening of the Body.—This may vary in length;

sometimes it is the same as the armhole, and sometimes the same as the front opening.

Length of Body of Shirt.—Night-shirts are always made longer and wider than dayshirts for the same height of the wearer: about $\frac{1}{8}$ of a yard longer than the day-shirt will be a good rule.

Construction.—(a) Seam the selvages; (b) fix hems at the bottom $\frac{3}{8}$ of an inch wide, and hem; (c) fell the binders on the wrong side; (d) put in the square gusset diagonally at the neck, and stitch it on the right side, and fell it on the wrong; (e) divide the shoulder-straps equally down their length, and fix them over the folded top edge of the body and the neck gussets, and stitch them at the edges, being careful not to fasten the armhole portion of the binders by the stitching; (f) line the front slit by false hems in the same way as the hip-opening of drawers, and fell on the wrong sides; (g) gather the body at the neck, from the edge of the right false hem to the edge of the left false hem over the shoulder-straps, dividing the material and regulating the fulness, according to rule; (h) set the gathers into the collar, and fell the collar to the false hems on the front; (i) stitch the collar on the right side $\frac{1}{4}$ of an inch above the gathers, and if the collar is made deep enough to turn over to the right side, stitch it on the wrong side $\frac{1}{4}$ of an inch from the top edge; (j) set in the body and front slit gussets, as in lesson on the gusset; (k) join the sleeves by sew-and-fell seam and close the wristbands by run-and-back-stitched seams, on the wrong side; (l) when the wristband is properly fixed, stitch it about $\frac{1}{4}$ of an inch from the edges, top and bottom, and then divide it into thirds, and place the join in it to the seam in the sleeve, and gather as much of the sleeve on either side of its folded edge as can be set into $\frac{1}{3}$ of the

wristband; (*m*) set the gathers in neatly and regularly, and fell the wristband to the plain portions of the sleeve on either side of the seam; (*n*) put the seam of the sleeve to the seam of the body, and between the body and the binder, and gather any extra fulness at the top of the sleeve, and set it in equally, on either side of the shoulder straps, fell or stitch the body to the sleeves on the right side, and fell the binders to the sleeves on the wrong side; (*o*) the edges of the front false hems may be stitched if liked; (*p*) cut the buttonholes the selvedge way of the collar and the front false hem, both ends of the buttonholes may be braced, or the corners nearest the end of the band, and at the top of the holes, on the false hem, may be worked *round*.

Another Method of Finishing the Front Opening by imitating a Box-pleat.—(*a*) Crease the garment down the front exactly in half; (*b*) measure to the right of the centre crease the difference between the widths of the left arm and right arm hems, and cut the length required; (*c*) at the bottom of the slit cut along the woof towards the right arm $1\frac{1}{4}$ inches (or less or more, according to the width of the hem required on the right arm side of the opening); (*d*) the hem on the right arm side must be folded back to the right side of the garment and tacked, and afterwards stitched instead of hemmed; (*e*) keeping the right side of the garment uppermost, turn one deep fold of the left arm slit to the wrong side ($1\frac{3}{4}$ inches wide if the right side hem is $1\frac{1}{4}$ inches) the whole length of the slit, and crease the folded edge firmly; (*f*) again turn this wide fold towards the wrong side, so that the raw edge is hidden and yet not rolled, and tack through the threefold thickness from the bottom to the top of the slit, $\frac{1}{4}$ of an inch from the edge, and afterwards stitch

through the threefold thickness; (*g*) flatten the seam on the wrong side, and be careful to see that the raw edge is well hidden; (*h*) stitch the outer edge of this pleat to correspond in width with the opposite edge, which rests on the garment.

N.B.—This method of fixing the left side of the front opening is in imitation of a box-pleat, and is a very neat and quick way, but the width of the material in the front of the shirt must be more, than if a front fold or false hem is used. The difference between the widths of the hems, given above, is $\frac{1}{2}$ an inch, so cut $\frac{1}{2}$ an inch to the right of the centre crease.

(*i*) When the front-opening pleat is stitched, fold back that portion of the material, which is cut across the woof at the bottom, on to the right side of the slit to form a pleat, and then fold the left side over the right, and stitch two parallel rows across the broad pleat at the bottom of the slit.

N.B.—There will be no difficulty with the fulness, nor will there be any raw edges on the wrong side. The bottom of the opening can be still further strengthened on the wrong side by felling a straight piece of tape across the pleat.

Collar and Collar-band all in One.—(*a*) If the size round the neck is 16 inches for the collar, cut a length selvedge-wise 18 inches, and half the collar length in depth, *i.e.* 8 inches; (*b*) fold the width in half, and well crease the edge, and then fold the length in half; (*c*) at the open selvedge edges crease inwards $1\frac{1}{2}$ inches in depth for the collar-band, the remaining $2\frac{1}{2}$ inches will be for the turned-down collar; (*d*) cut in from the open ends $1\frac{3}{4}$ inches along the crease just made for the collar-band; (*e*) cut off the $1\frac{3}{4}$ inches that are at the end of the collar, either quite straight if for a night-shirt, or in a slanting direction from the collar-band to the folded edge of the collar, if for a flannel day-shirt, or a woman's or a girl's night-gown; (*f*)

round the ends of the collar-band, or keep them straight ; (g) the raw edges at the ends of collar and collar-band can be finished off on the wrong side by a run-and-back-stitched seam, or the edges may be turned in, and then stitched on the right side.

N.B.—This is a good method for lawn-tennis and cricketing shirts, and for boys' flannelette day-shirts. The outer folded edge of the collar is shaped by cutting from the point of the collar inwards.

Another Method of fixing Collar and Collar-band.—(a) Cut the collar the required length and depth, according to scale, and the collar-band 2 inches longer, and the depth according to scale ; (b) fix the ends of the collar by turning in a fold $\frac{1}{4}$ inch wide ; (c) crease the collar down its depth into halves, and place the right side uppermost ; (d) cut the collar-band into two strips down the length, and then fold them into halves ; (e) place the selvedge edges of the separated collar-band to the selvedge edges of the collar, the centre creases matching, and the collar-band extending beyond the collar, at either end, 1 inch ; (f) tack the collar-bands to the right side of the collar $\frac{1}{4}$ inch from the edges, and then run-and-back-stitch both selvedge edges ; (g) turn the bands back from the collar, and press the joins flat and even ; (h) fold the collar into halves along its length, and all the raw edges will be inside ; (i) shape the corners of the collar-band, if liked, and turn these raw edges in ; (j) the folded edges of the collar and collar-band at either end must be seamed or stitched on the right side ; (k) turn under one fold of the collar-band, and then it is ready to be fixed to the neck of the shirt.

SCALE OF PROPORTIONS FOR SHIRTS

(Night-shirts and Day-shirts)

1. Body.—(a) Night-shirts: length of back = $\frac{3}{4}$ of the height.
- (b) Day-shirts: ,, ,, ,, = $\frac{5}{8}$,,
 height.
- (c) Length of front, 2 or 4 inches shorter than the back.

N.B.—When a yoke is placed on the body, the length of the back must be less in proportion to the depth of the yoke, both in day and night shirts.

Breadth of the Body.—(a) Night-shirts = $\frac{4}{5}$ of the length of the front of the body.

(b) Day-shirts = $\frac{3}{4}$ of the length of the front.

• *N.B.*—In small sizes of boys' shirts the breadth is the same as the length.

Armholes = $\frac{1}{2}$ the length of the sleeve.

Body Flaps.—Front of body the same as the length of the armholes in day-shirts, and the length of the collar in night-shirts.

2. Yoke.—(a) Night-shirt: length = $1\frac{1}{4}$ of the collar.
- (b) Day-shirt: length = $1\frac{1}{8}$ of the collar length.
- (c) Depth of yoke = $\frac{1}{4}$ of its own length.
- (d) Shoulder slope of yoke and front of body = $\frac{1}{2}$ the collar length—1 inch for day-shirts, and $\frac{1}{2}$ the collar length for night-shirts.

(c) Depth of yoke in the centre of back and over the armholes = $\frac{1}{2}$ its own depth, when fully fixed.

3. Shoulder straps (if used instead of a yoke).—

(a) Length = $\frac{1}{4}$ the breadth of the material in the front of shirt.

(b) Width = $\frac{1}{4}$ its own length.

4. Sleeves.—(a) Length = $\frac{1}{2}$ of front shirt length for day-shirts, and = $\frac{2}{3}$ the length of front for night-shirts.

(b) Width at the top = $\frac{1}{12}$ less than the length. Example: if $22\frac{1}{2}$ inches long, the width must be about $20\frac{1}{4}$ inches.

N.B.—In boys' shirts the width should equal the length.

(c) Width at the wrist = $\frac{2}{3}$ of the whole width of the sleeve.

5. Wristband.—Open or closed: (a) Length = $\frac{1}{2}$ the length of the sleeve.

N.B.—This proportion allows for lapping, shaping, and turnings.

(b) Depth = $\frac{1}{2}$ its own length.

(c) Wrist-opening = $\frac{1}{2}$ the length of the wristband.

6. Collar-band.—(a) Length = length of collar + 2 inches for lapping, shaping, and turnings.

(b) Depth = $\frac{1}{7}$ of collar length.

N.B.—This allows for shaping and turnings.

7. Collar.—(a) Length = size of neck.

(b) Depth = $\frac{1}{4}$ its own length.

N.B.—These proportions are for an attached collar.

8. **Binders.**—(a) Length = length of the armholes + the width of binder, when the width = $\frac{1}{8}$ or $\frac{1}{4}$ of the collar length.
 (b) Width : day-shirts = $\frac{1}{8}$ or $\frac{1}{4}$ of collar ;
 night-shirts = $\frac{1}{4}$ or $\frac{1}{5}$ of the collar.
9. **Front Fold, or False Hem, for Front.**—(a) Length = length of the slit in the front + 2 inches.
 (b) Width = $\frac{1}{8}$ of the collar length in day-shirts, and = $\frac{1}{5}$ of the collar in night-shirts.
10. **Opening of Front of Body.**—(a) Night-shirts = length of the collar.
 (b) Day-shirts = $\frac{7}{8}$ of the collar length.
11. **Gussets.**—(a) Neck gussets for night-shirts ; square gussets $\frac{1}{4}$ of the collar length.
 (b) Body-flap gussets : diagonals of squares = $\frac{1}{5}$ of the length of collar.
 (c) Wrist-opening gussets ; diagonals of squares $\frac{1}{6}$ of the collar length.
12. **Slope of Front of Neck.**—(a) Day-shirts = $\frac{1}{6}$ of the collar length.
 (b) Night-shirts, a little less than $\frac{1}{8}$ of collar length.

- N.B.*—1. In all the above proportions, turnings are included.
 2. In making shirts for any one member of a family, three measurements are essential : (1) The size round the neck ; (2) the length from the top of the shoulder near the neck to just above the knee ; (3) the length of the sleeve. (Shirtmakers measure from the backbone, half-way between the shoulders, along the stretched out arm to the knuckle of the little finger for the sleeve.)
 3. See Figs. 250–252 for men's night-shirts and flannel under-shirts, otherwise flannel vests, cut out by folding processes.

PLAIN SHIRTS FOR WORKING BOYS

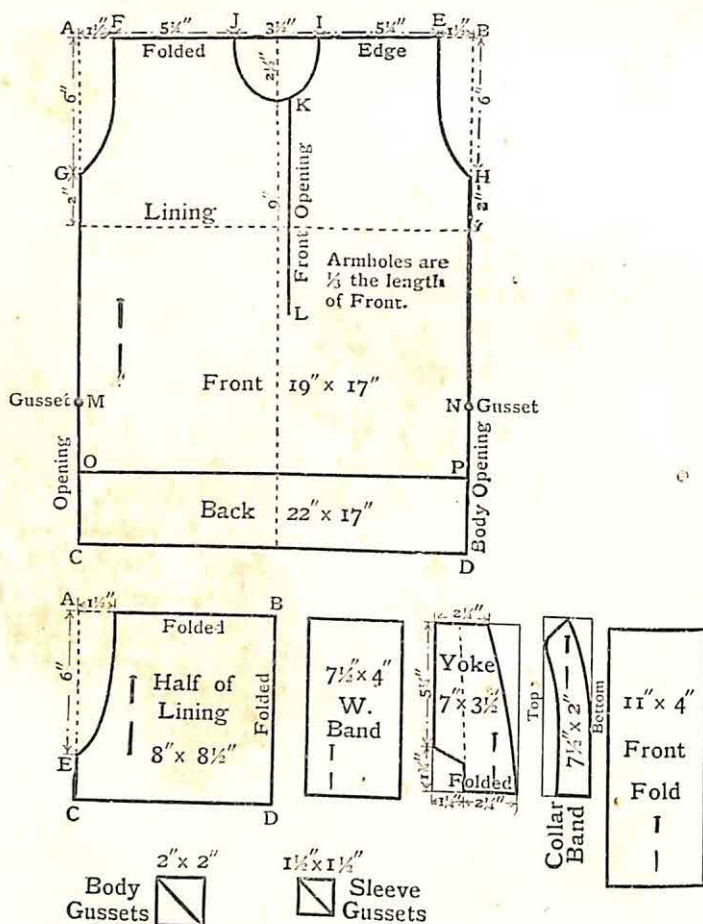


FIG. 191.

1. **Lining.**—The body of these shirts is lined on the wrong side, both back and front, from the top folded edge to two or three inches below the armholes. The lining must be fitted to the body, before any shaping is attempted, and must be neatly tacked, so as to prevent puckering, and then strongly felled to the garment. The armhole and neck curves must be cut exactly like those of the body. The lining forms binders for the sleeves.

2. **The Yoke.**—The yoke is made of single material, and must be the width of the shirt, after the slopes of the armholes have been decided upon. The back neck is kept quite straight, and corresponds in width to that of the back body neck. The front neck is curved to fit the neck of the front body. The shoulders of the yoke are kept quite straight, and the same length as the shoulders of the body. In the first size shirt, the yoke must lie over the top folded edge of the body for *one inch* towards the front, and in the larger sizes one and a half inches, and must be felled or stitched close to the edge. The rest of the yoke falls to the back body, and should be shaped as in diagram, Fig. 191, and felled or stitched. The yoke forms an ornament, as well as still further thickening the garment, where it is liable to great strain. The yoke lies quite flat on the body, which is neither pleated nor gathered into it. This pattern shirt is peculiarly suitable for such materials as very coarse shirting, flannelette, or flannel.

3. **The Sleeves** must be made wide enough at the top to fit the armholes, without any pleats or gathers, and must be placed quite smooth and flat between the lining and the body of the shirt. It may be found necessary to make each sleeve of an oblong of material, instead of a

square, as given in diagram, Fig. 192, and table of measurements, making the width more than the length. The wristbands are made open.

4. **The Front Opening** must be cut to the left of the centre crease, so that the right arm side is widened sufficiently to be finished off by a narrow hem, which, in fixing, must be brought off to a point at the end of the slit. The left arm side is widened by the front fold, which must be joined to the body, and so fixed as to form a pleat.

5. **The Collar-Band** is deeper at the back than in the front, and is longer on the left arm side of the neck than on the right arm side, because the front fold has widened this curve of the neck. As the collar-band is shaped, it gives the appearance of a curve to the back neck of the body and yoke, when properly fixed on.

6. **The Body Opening, or Flaps**, are usually made the length of the armhole, or longer if preferred, and with the side seams are kept quite straight in this pattern.

N.B.—These shirts, in regard to gussets, buttonholes, and buttons, etc., are finished off as described in previous pages on shirt-making.

Cost.—(a) *Calico Bodice*—

1 $\frac{1}{4}$ yards of calico, at 6 $\frac{3}{4}$ d. per		
yard	0s.	8 $\frac{3}{4}$ d.
Linen buttons	0	1 $\frac{1}{2}$
Sewing and crochet cotton for		
feather-stitch	0	1
Piping cord for neck	0	0 $\frac{1}{2}$
1 $\frac{1}{2}$ yards of trimming for neck		
and sleeves, at 2d. per yard	0	3
	<hr/>	<hr/>
	1s.	2 $\frac{3}{4}$ d.

Cost, without trimming, 11 $\frac{3}{4}$ d.

(b) *Flannel Bodice*—

1 $\frac{1}{2}$ yards of flannel, at 1s. 3d.		
per yard	1s.	10 $\frac{1}{2}$ d.
Pearl buttons	0	2
Sewing cotton and flourishing		
thread	0	2
1 $\frac{1}{2}$ yards of flannel em-		
broidery, at 5 $\frac{3}{4}$ d. per yard	0	8 $\frac{3}{4}$
	<hr/>	<hr/>
	2s.	11 $\frac{1}{4}$ d.

Cost, without trimming, 2s. 2 $\frac{1}{2}$ d.

(c) *Flannelette Bodice*—

1 $\frac{1}{2}$ yards of flannelette, at 5 $\frac{3}{4}$ d.		
per yard	0s.	8 $\frac{3}{4}$ d.
Buttons	0	1 $\frac{1}{2}$
Cotton and flourishing thread	0	1 $\frac{1}{2}$
1 $\frac{1}{2}$ yards of flannel trimming,		
at 3 $\frac{3}{4}$ d. per yard	0	5 $\frac{3}{4}$
	<hr/>	<hr/>
	1s.	5 $\frac{1}{2}$ d.

Cost, without trimming, 1s.

Construction.—(a) The seams in a calico bodice are fixed in various ways (see Lesson on Seams): counter-hem, and

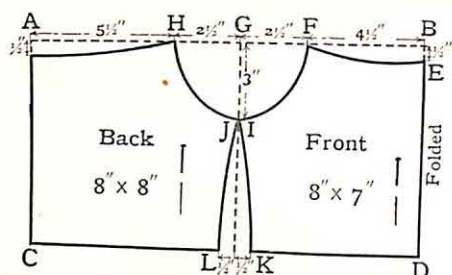


FIG. 194.—CHILD'S PETTICOAT BODICE. (1) Line the armholes with false hems on the cross; and the waist by a false hem of straight material for a string casing. (2) Line the neck with a false hem on the cross, and allow 5 inches of this material to form the shoulder strap of each armhole. (3) Place one buttonhole on the right arm back hem, and one button on the left arm hem. (4) Run tape strings through neck and waist hems.

stitched on the right side, is very general; (b) the neck is best finished off by a false hem on the cross, the edge being piped (see Lesson on Piping), and then neatly hemmed on the wrong side; (c) the front openings must be lined by false hems on the cross, quite 1 inch wide, and stitched

at the outer edges, on the right side of the garment, and either hemmed on the wrong side of the hem, or stitched on the right side; (d) the hem at the bottom of the *basque* may be taken from the garment, or may be a false hem on the cross; (e) the seam in the sleeve must match the other seams in the garment, if the sleeve is made of the same material; (f) the most usual way of finishing off the armholes is by a false hem on the cross, with the trimming placed between it and the garment (see Chemise Sleeve).

N.B.—If a calico sleeve is put in and no trimming is used, the hem is a piped one on the cross.

(g) a string casing is sewn on the wrong side of the garment at the waist line, and a tape is run between it and the garment.

Note.—The garment is ornamented by feather-stitch on the neck, sleeve, and front hems, if stitching is not used. Tucks are frequently used for ornamenting the back, fronts, and sleeves. The back is made all in one piece, if tucks are employed. All parts of the garment tucked must be made wider and deeper at first. The seam in the sleeves must not be put to the under arm seams, but in a line with the longer breast-pleat.

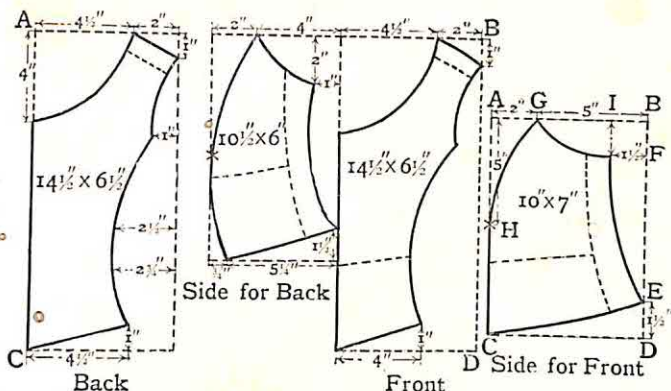


FIG. 195.—GIRL'S PETTICOAT BODICE (3 to 5 years of age). (1) *The Skirt* must be 9 inches long when finished, and must contain $1\frac{1}{2}$ breadths of 36-inch calico. 4 inches must be allowed for hem and tucks. (2) *Waistband* for lining the gathers must be 33 inches long and 2 inches deep, and must form string casing. (3) *Neck and Armholes* must be lined with false hems on the cross, and piped.

AN INFANT'S LONG PETTICOAT WITH BODICE

(Fig. 196)

Suitable Materials.—Lawn, Cambric, Nainsook, fine white Calico.

Method.—*The Skirt.*—Cut two breadths of material 1 yard long, and 30 inches wide. This length will allow

of a hem 1 inch deep, and 6 tucks, $\frac{1}{4}$ inch deep. The opening, or placket-hole of skirt, must be 9 inches long.

The Bodice.—(a) Take a piece of the material 5 inches deep (selvedge way) and 24 inches wide; (b) fold this material into halves, and then into quarters, the fourfold thickness (two creases)

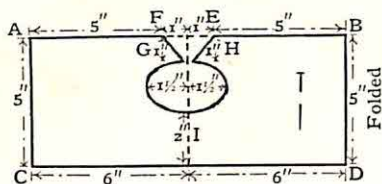


FIG. 196.—BODICE FOR INFANT'S LONG PETTICOAT.

will be under the arm, the armhole, and the place to measure from for the shoulders; (c) measure in from the fourfold edge 1 inch, and measure down 1 inch, and fold a diagonal crease for

the shoulders, F to G and E to H; (d) the bodice below this crease is 4 inches deep, divide these 4 inches into halves for the depth of the armhole, then divide the 2 inches for the armhole into halves, and measure inwards from the folded fourfold edges $1\frac{1}{2}$ inches for the slope of the armhole; (e) cut off the one-inch diagonal slope of the shoulder, and then cut from armhole point of the shoulder inwards to the $1\frac{1}{2}$ inches and through the fourfold material to the crease, which indicates the length of the armhole. There will be 2 inches left under the arm. (If liked the bodice could be made deeper.) The neck portions can be quite straight, or curved out a little. The waistline must be kept straight.

Construction.—(a) Join the breadths of the petticoat by run-and-fell seam; (b) shorten the garment 4 inches by hem and tucks; (c) Cut a placket hole 9 inches deep, in the middle of a breadth, and finish it off as described in the lesson on the placket hole; (d) turn down a fold at the top to the wrong side, then divide into halves and

quarters and gather; (*e*) put hems of $\frac{1}{2}$ an inch wide on the selvedge edges of the backs of the bodice; (*f*) join the shoulders by run-and-fell seam (or any other method of joining); (*g*) put hems at the neck, and waistline, sufficiently deep to carry narrow tape strings; (*h*) put very narrow hems round the armholes; (*i*) place a button in the middle of the left back hem, and a buttonhole on the right back hem (cut across the material), or two tape strings.

N.B.—If the bodice is trimmed, very narrow lace edging, or *everlasting* edging should be used.

CHAPTER XII

INFANTS' SHIRTS

BABY'S FIRST SHIRT (Figs. 197, 198, and 199)

1. **Suitable Materials.**—Lawn or Cambric, or fine Linen, from 1s. 6d. per yard, or fine Calico from 6 $\frac{3}{4}$ d. per yard, or Nainsook at the same price.

2. **Quantity of Material required.**—These small shirts are always cut in sets of not less than three, and more usually in sets of half a dozen or a dozen. The quantity will depend on the size of the garment, and the width of the material. If Nainsook is used, it is wide enough to give the first baby shirt off the width, and a closed shirt. Three can be cut out of 1 yard leaving 6 inches over, so that if 2 yards of Nainsook from 36 to 40 inches wide be used, it will give seven first shirts like the diagram (Fig. 197), and three closed shirts (12 × 12 inches, when folded at the top).

3. Cost of seven Open Shirts, with material over for three Closed Shirts—

2 yards of Nainsook at $6\frac{3}{4}$ d. per yard	1s.	$1\frac{1}{2}$ d.
Fine cotton, one reel (not all used)	0	$2\frac{1}{2}$
A card of lace edging, one dozen yards for	0	$6\frac{3}{4}$
	1s.	$10\frac{3}{4}$ d.

N.B.—The cost of one shirt would be about $2\frac{1}{4}$ d.

4. Construction.—(a) *Hems*.—The first hems should be made the selvedge way, about 2 inches from the top, i.e.

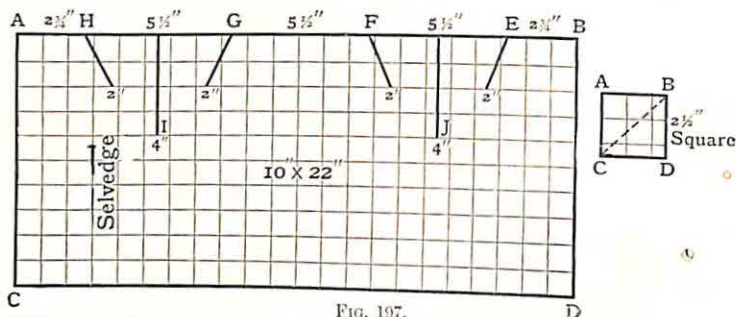


FIG. 197.

N.B.—The width of material in an infant's first shirt may vary from 21 to 25 inches. The depth varies from 8 to 10 inches.

the depth of the flaps. The hems for the flaps are fixed on the right side of the stuff, because the flaps fall over on to the right side, but they should not be fixed until the shoulders are joined. The bottom hem is fixed after the side hems, and is of the same width. The gusset must be hemmed on all three sides, selvedge side first. The armhole is also hemmed.

N.B.—The material being muslin, the first turn must be as deep as the second, and the hems must be exceedingly narrow.

(b) *Seams*.—The shoulders are joined by counter-hem or fixed for counter-hem and stitched; in the latter case

at the shoulder seam. Everlasting edging must be hemmed to the garment in the following way:—put the right side of the edging to the wrong side of the garment, and hem neatly, being careful with the joins. If the webbing is wide, fasten that portion just below the pattern to the edge of the hem by running stitches, or feather-stitch, or knot

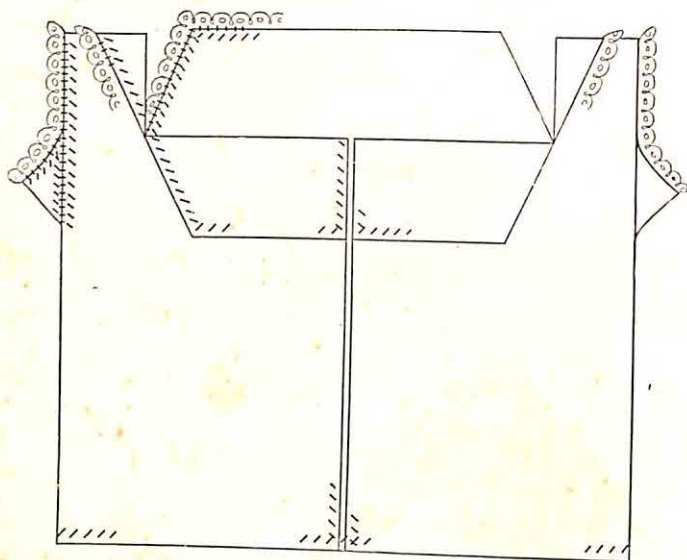


FIG. 199.—Finished Appearance of Fig. 197.

the edge of hems to the trimming, on the right side, if hems are wide enough.

Note.—The gusset may be placed by counter-hem on the garment and stitched. The difficulty of this method is with the corners of the gusset, which ought to lie quite flat and smooth.

Cutting out a Baby's First Shirt by Folding.—(a) Take a piece of lawn or Mull muslin, or soft calico, 10 inches selvedge-way and 22 inches wide (or wider if liked); (b)

fold the material into halves down the selvedge, then into quarters, and then into eighths, and open it so that it is $5\frac{1}{2}$ inches wide and fourfold; (c) divide it across the width into thirds; (d) lay the fourfold doubled edges to the left with the selvedge going up and down; (e) fold the material from the top eighth crease down to the two-thirds crease in a slanting line; (f) fold the top third into thirds across its width, and cut from the top along the diagonal line as far as two-thirds of the first third (this is for the shoulder and the flaps); (g) cut down from the top through the fourfold thickness to a little below the first third crease for the armholes; (h) take a $2\frac{1}{2}$ inch square of the material, and fold it from corner to corner, and cut for the gussets.

N.B.—Infants' First Shirts are made two and a half times wider than the depth.

• A LARGER-SIZED OPEN SHIRT (Figs. 200 and 201)

Cutting out a larger size (Fig. 200).—(a) The folding into halves, quarters, and eighths down the selvedge is the same as in the first pattern, as well as the creasing into thirds across the width. The cutting out is also the same, except that the armhole is curved a little, and the *back flap* is cut off in a straight line; (b) instead of diagonal gussets for the armhole, there is a shaped sleeve (see Fig. 200).

Construction is the same as for Fig. 197, except that, where the flap has been cut off, the material is gathered in the centre (about 4 inches drawn up to 2 inches), and set into a band of insertion nearly 6 inches long. A fold of the lawn, $\frac{1}{4}$ inch deep, must be turned down on the right side of the material, and the gathers

crease across the wof is the length of the armholes ; mark these H, G ; (f) fold A, B down to H, G, so that this will divide the top third into halves ; (g) measure from where this crease intersects the lengthwise creases 1 inch outwards towards the armholes, and mark I, J ; (h) cut slanting lines

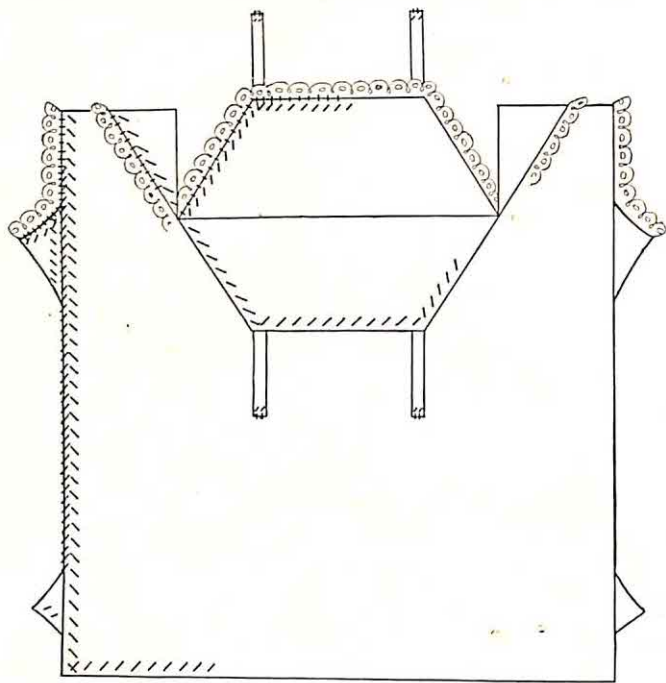


FIG. 203.—CLOSED SHIRT FINISHED.

from E to J and F to I half an inch below the 2-inch crease, to form the shoulder slopes and flaps ; elicit (1) that the flaps must be cut along the top folded crease, so as to fall down, and thus make an aperture for the head to go through, (2) that the armholes are 4 inches long, and (3) that every third part is 4 inches long ; (i) the sleeve gussets are diagonals of a three-inch square ; (j) the body gussets

are diagonals of a $2\frac{1}{2}$ -inch square; (*k*) the body flaps at the sides near the hem are left open $\frac{1}{6}$ of the length, *i.e.* 2 inches, and the gussets are put in at these points, like the gussets for a man's or boy's shirt (see Lesson on this Gusset).

Construction.—(*a*) The sides are seamed and felled, or run and felled from the armholes to within 2 inches of the hem; (*b*) the bottom has a very narrow hem; (*c*) the gussets are set in at the end of the seams, as described above; (*d*) the armholes have very narrow hems, and the gussets are also hemmed, as in the first open shirt, and seamed into the armholes to form the sleeves; (*e*) the flaps and shoulder points are hemmed on the right side of the garment, so that when they are turned back they match the hems on the armholes and at the bottom; (*f*) fape strings are very often hemmed to the corners of the flaps on the wrong side, to be under the child's arms, and thus keep the flaps down. Fig. 203 gives the finished appearance of this little garment, which can be quite easily cut out by girls in an upper class.

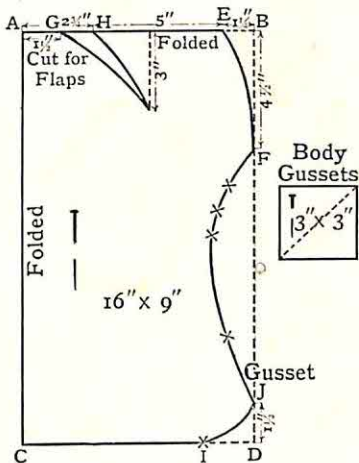


FIG. 204.—CLOSED SHIRT (2nd Size).

N.B.—Fig. 204 is cut out in a similar fashion, and the construction is the same, except that the armholes being shaped do not require any gussets to enlarge them. These little *closed* shirts can be made out of the material which comes off the width of Nainsook, or calico, which is used for the open shirts. For instance, if the Nainsook is (as it is sometimes) nearly 40 inches wide, there would be ample to make *open* shirts of the larger size, or if Nainsook and calico are 36 inches wide, a *first* size open shirt and a *closed* shirt can be obtained from the width.

N.B.—Fig. 204 is cut out in a similar fashion, and the construction is the same, except that the armholes being shaped do not require any gussets to enlarge them. These little *closed* shirts can be made out of the material which comes off the width of Nainsook, or calico, which is used for the open shirts. For instance, if the Nainsook is (as it is sometimes) nearly 40 inches wide, there would be ample to make *open* shirts of the larger size, or if Nainsook and calico are 36 inches wide, a *first* size open shirt and a *closed* shirt can be obtained from the width.

CHAPTER XIII

INFANTS' BARROWCOATS OR LONG FLANNELS

1. **The Name.**—Halliwell says the name *barrow* is given to an infant's flannel in Somersetshire. In Devonshire it is called a *Whittle*.

2. **Suitable Materials.**—*Soft white Saxony flannel*, varying in price from 9 $\frac{3}{4}$ d. to 1s. 9d. per yard, and from 24 to 32 inches wide; or for poorer babies a coarser flannel, varying in price from 7 $\frac{3}{4}$ d. to 10 $\frac{3}{4}$ d. per yard, and in width from 24 to 29 inches.

3. **Quantity.**—The garment is variously shaped. The most elaborate style is made with a skirt and a shaped waistband, and the simplest style is made by joining one and a half breadths of flannel, and making the body and skirt all in one. 2 $\frac{1}{4}$ yards of flannel will make two of the latter style, and two would be the least number provided for the poorest baby. The simplest pattern is a comfortable one, and can be put on easily, and gives as much warmth and support to the child as the more elaborate pattern. The barrowcoat made with a separate skirt and waist is generally used as a day-flannel. This pattern requires more material than the barrowcoat made out of one piece of stuff, because the body must be lined, and the length is cut with the selvedge. One and a half breadths of flannel are needed for the skirt, which may be either 24 or 27 inches long. The waist is made out of a half breadth of the flannel, and is from 27 to 36 inches long, so that 1 $\frac{1}{2}$ or 1 $\frac{3}{4}$ yards of flannel will give one barrowcoat. There would be $\frac{1}{4}$ yard saved in cutting two, with waists 36 inches long.

4. **Cost of two Barrowcoats** (*simple pattern*)—

2 $\frac{1}{4}$ yards of flannel at 1s. per yard . . .	2s.	3d.
8 „ „ binding at $\frac{1}{2}$ d. per yard . . .	0	4
Tapes for strings, about	0	1
Sewing cotton and flourishing thread . . .	0	2
	<hr/>	
	2s.	10d.

Cost of one, 1s. 5d.

N.B.—With a cheaper flannel, and only binding the top edge, the garment can be made at the rate of 10d. or 1s. each.

Cost of two with waistbands (waist 27 inches long)—

3 yards of flannel at 1s. 4d. per yard . . .	4s.	0d.
1 dozen yards silk galloon at 1 $\frac{1}{2}$ d. per yard	1	6
Sewing cotton, flourishing thread, or filoselle, for feather-stitching	0	6
	<hr/>	
	6s.	0d.

or 3s. each.

N.B.—3 $\frac{1}{4}$ yards would be needed, if waist is made 36 inches long.
If this garment is scalloped at the bottom edge and embroidered,
the cost will be increased for filoselle or flourishing thread.

5. **Construction.**—(a) *Seams.*—Join the breadths to the half breadths by the open flannel seam (see Lesson on Seaming Flannel), being careful to match the selvages, the right sides, and the way of the nap.

(b) *Binding.*—Bind the selvages and bottom edge (see Lesson on Binding) with the flannel binding.

(c) *Double or Box-pleats.*—(1) Divide the garment in half down its length with the right side out; (2) place the folded edge to the left hand, and measure downwards 6 $\frac{1}{2}$ inches and 2 $\frac{1}{4}$ inches inwards, both at this point and at the top, and put in pins; (3) tack quite evenly and nicely

from $6\frac{1}{2}$ inches to the top; (4) run-and-back-stitch or machine-stitch along by the tacking cotton, measuring now and again from the folded edge, to see if the pleat is $2\frac{1}{4}$ inches wide; (5) flatten the seam on the wrong side, by placing the finger and thumb between the folds of the pleat; (6) turn the garment with the right side towards you, and lay the crease of the folded edge on the centre of the seam, flatten well, and tack in zigzag across; (7) notice that the space lying under each half of the pleat is $1\frac{1}{8}$ of an inch wide; * (8) leave $1\frac{1}{8}$ of an inch between each folded edge of the centre pleat, and the pleat on either side of it; (9) then measure from this $1\frac{1}{8}$ of an inch to the right and left of the centre crease $2\frac{1}{4}$ inches, and put in pins; (10) fold the material down to $6\frac{1}{2}$ inches, and tack at even distances from the folded edges, keeping the pleats $2\frac{1}{4}$ inches wide; (11) run-and-back-stitch neatly and firmly, and flatten the seams, and open and tack the pleats, as described above; (12) stitch or feather-stitch the edges of the pleats to the garment, as deep as the waist, *i.e.* $6\frac{1}{2}$ inches, and fix the pleats at the bottom by stitching or feather-stitching them across in two rows, about $\frac{1}{2}$ inch apart.

(d) *Curving the Armholes.*—(1) Measure away from the edges of the outer pleats 2 inches along the top of the garment towards the right and left, and mark by pins; (2) divide this measurement into halves, and measure down from it $1\frac{3}{4}$ inches and mark by a pin; (3) cut good curves from the edges of the pleats through $1\frac{3}{4}$ inches up to the measurement 2 inches; (4) bind the top of the

* From direction (7) read 1 and $\frac{1}{8}$ of an inch. The buttons must be on the right side of the garment, and the herring-bone cross-stitch on the wrong side of the flannel in the diagram.

garment and the armholes, being most careful to fix and secure the binding properly over the pleats.

N.B.—If liked, curve the top of the back and the fronts a little before binding. The curves should not be cut very deep.

(e) *Shoulder straps.* (These are very often dispensed with.)—Cut the shoulder straps 5 inches long; crease them in half, and stitch the open edges together; turn under the raw edges at the ends, and stitch one end, and

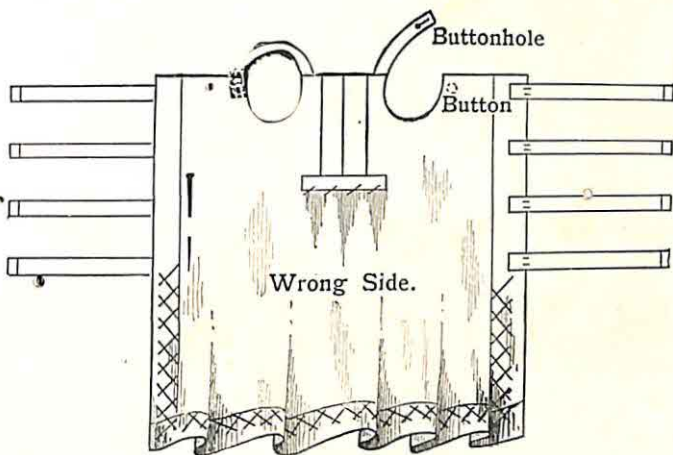


FIG. 205.—SIMPLE PATTERN—BARROWCOAT.

work a buttonhole on it; fell the other end to the back armhole point on the right side of the garment; sew a pearl button on the front armhole point, on the right side of the garment.

N.B.—When the shoulder straps are fastened by buttons and buttonholes, the barrowcoat is more easily put on and taken off.

(f) *Tape strings.*—(1) Sew on four tapes to each selvedge side of the fronts, putting the first two at the top of the garment, and the others at regular distances

from each other, as far as half the length of the garment ; (2) the tapes on the baby's right arm side must be fastened on the wrong side close to the edge ; and the tapes on the left arm side must be stitched to the flannel, on the right side of the garment 4 or 5 inches from the binding (Fig. 205).

N.B.—A piece of tape or flannel should be placed on the wrong side to form double material under the tape string. If liked, cover the stitched square of tape on the right side with a square of flannel, which must be neatly herring-boned to the garment. Lapping the garment in this way makes the front as warm as the back.

6. Construction of Shaped Waist (Fig. 206).—(1) Tack and then quilt the waist and its lining in the back portion, and stitch the diagonal lines with silk ; (2) bind the edges and the slit under the left arm with silk galloon.

N.B.—The waist being double, great care will be needed in putting on the binding even and unpuckered.

(3) Sew on strings of galloon, or ordinary binding, 18 inches long, at the ends of the waist, and on the wrong side, to tie the shaped flaps of the waist round the baby's body ; (4) make and sew on the shoulder straps as described in the previous lesson ; (5) ornament the edges of the waist below the binding by feather-stitch ; (6) bind the selvedges and bottom of the skirt (unless bottom is scalloped and embroidered), and ornament with feather-stitch to match the waist ; (7) pleat the top of the skirt in small single pleats, which may fall towards the centre crease or to the sides of the body ; (8) in pleating, skilfully hide the join in the breadths of the skirt ; (9) leave the fronts of the skirt plain from the bound edges to within 1 inch of the armhole, or to the middle of the armhole ; (10) fix the waist to the skirt, placing the

of Mull muslin from 34 to 36 inches wide are needed; the back breadth must be 40 inches long, and the front, without the waist, must be 34 inches long. $2\frac{1}{2}$ yards will be ample, with material over for another pair of sleeves.

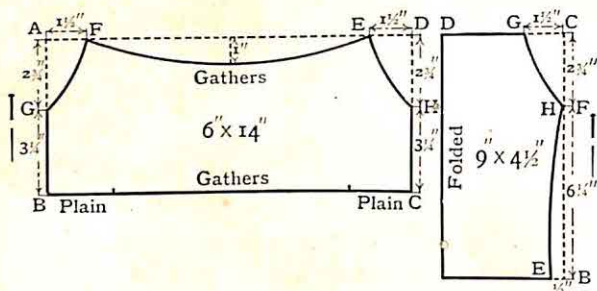


FIG. 207.

$4\frac{3}{4}$ yards will give two garments. Sash strings must be taken from the width of the stuff.

Cost of two Baby's Daygowns—

$4\frac{3}{4}$ yards of Hair Cord at 1s. per yard	4s.	9d.
$2\frac{1}{2}$ „ „ patent Valenciennes lace at 3d.		
per yard	0	$7\frac{1}{2}$
Tape, sewing and crochet cotton, and buttons,		
about	0	$1\frac{1}{2}$
	<u>5s.</u>	<u>6d.</u>

Cost of one, about 2s. 9d.

Cost of two Daygowns for a Poorer Baby—

$4\frac{1}{4}$ yards of print at $5\frac{1}{2}$ d. per yard	1s.	$11\frac{1}{2}$ d.
$2\frac{1}{2}$ yards of trimming at $\frac{1}{2}$ d. per yard	0	$1\frac{1}{4}$
Sewing cotton, tape, and buttons	about 0	1
	<u>2s.</u>	<u>$1\frac{3}{4}$d.</u>

Cost of one, about 1s. $\frac{1}{4}$ d.

Construction.—(a) Join the sides of the breadths by Mantua-maker's hem; (b) put a deep hem at the bottom, and a few narrow tucks above it; (c) gather the front breadth from side seam to side seam, turning down about $\frac{1}{4}$ of an inch of the material to the wrong side, and overcasting the raw edge. The front breadth must be 9 inches wide, when the gathers are fully drawn up to match the width of the bottom of the body; (d) gather the body at the waist, leaving $2\frac{1}{2}$ inches plain from the side seams, which are formed by joining the waist to the back breadth of the garment.

N.B.—When the gathers are drawn up, the waist should measure from side seam to side seam 9 inches.

(e) Set the waist into a band 9 inches long and $\frac{1}{4}$ of an inch deep when turned up to the wrong side; (f) set the gathers of the front breadth into this waistband, and gather the body in rows 1 inch deep above the waistband and 1 inch deep below the neckband, and bias the gathers, or gage them; (g) lay over the gathers, at the bottom of the waist, a piece of insertion 4 inches long, and pleat the sash strings to 2 inches in width, and lay them under the ends of this insertion, and fell or stitch the insertion above; (h) the seams of the sleeves must be joined by Mantua-maker's hem, and set into the armholes of the body, in the same way. The tops of the sleeves form the shoulders of the body, and they must be gathered with the rest of the top of the garment, and set into a neckband 18 inches long.

N.B.—The neckband should be ornamented by feather-stitching and knotting, before it is doubled in half.

(i) The wrists of the sleeves should measure 7 inches, after being gathered. A plain piece of material should be left on either side of the seams, so that the fulness shall

to the open edges to within $1\frac{1}{2}$ inches of the bottom, for

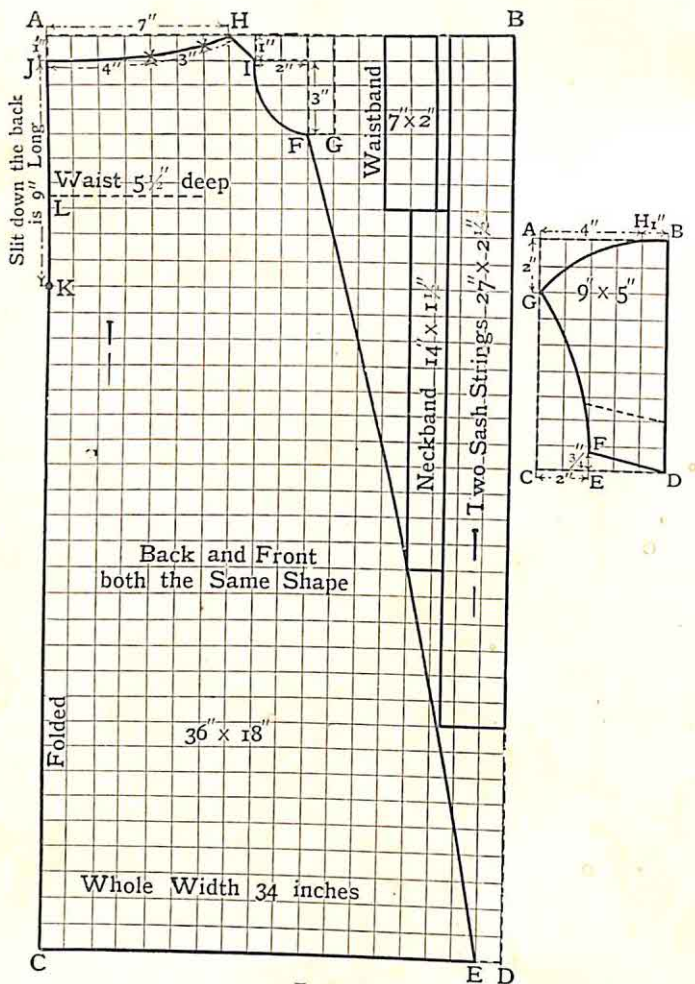


FIG. 208.

the side slope; (l) cut this fourfold material off, keeping all the slopings in one piece.

N.B.— $1\frac{1}{2}$ inches are kept straight at the bottom, to allow of fixing the hem correctly.

The Sleeve.—(a) Fold the sleeve in half down its length, and crease it well; (b) divide it again into half, so that each half will be $2\frac{1}{2}$ inches wide; (c) divide into fourths across the width and make creases; (d) place the open edges to the right hand, and cut from nearly the first top fourth in an outward curve the top of the sleeve at the middle crease.

N.B.—This shapes the armhole portion of the sleeve.

(e) Turn the top part of the sleeve towards you, and the folded edge to the left hand, and curve inwards gradually till you have nearly reached the half crease, i.e. $2\frac{1}{2}$ inches in at the wrist; (f) cut off in a slanting line $\frac{3}{4}$ of an inch from the open edges of the wrist down to the bottom of the outside folded edge of the sleeve.

The Bands and Strings.—Fold these the length required selvedge-way of the sloping and the width required, and cut in good straight lines, being careful to allow for turnings.

Construction.—(a) Join the sloped sides of the body by Sew-and-fell or Run-and-fell seams, or by fixing for Counter-hem, and hemming on right and wrong sides, or stitching at the edges, on the right side of the garment; (b) join the shoulders by Sew-and-fell or Run-and-fell, or by fixing for Counter-hem, and stitching the edges on the right side of the garment.

N.B.—The seams must be narrow and yet lie perfectly flat.

(c) Fix the hem at the bottom, quite $\frac{3}{4}$ or 1 inch deep, and neatly hem.

N.B.—The fixing of baby linen is quite an art, for no seams or turnings must be wide or clumsy.

(*q*) Fix the hem on the right arm side of the back opening wider than on the left arm side, because the garment laps right over left.

N.B.—The hem on the right must be $\frac{3}{4}$ of an inch deep, and must be kept the same width its whole length, as in the placket-hole of a petticoat; the hem on the left must be $\frac{1}{2}$ inch wide at the top, and narrower towards the end of the opening.

(*e*) Neatly hem, and buttonhole the end of the slit, on the wrong side; (*f*) lap the right hem over the left, and stitch two parallel rows across it, one below the end of the slit and one above it; (*g*) gather the fulness of the front of the garment, after marking the divisions of half and quarters, from $\frac{1}{2}$ an inch of one shoulder seam to the other, *i.e.* leave a plain space after and before the shoulder seam; (*h*) measure 1 inch away from the shoulder seams on both backs towards the hems, then divide into halves and quarters and gather.

N.B.—The gathers must be rather fine, and neatly stroked and set in.

(*i*) Stitch or feather-stitch the edge of the neckband; (*j*) leave the right arm end of the neckband open, to allow of the tape string coming out, but be careful to stitch it at the edge before the band is doubled at the top; (*k*) sew up the left arm end of the band, and cut and work an eyelet-hole on the right side of the band, parallel with the left arm hemming, before the neckband is set on the garment.

Sleeves.—(*a*) Join the seams by Sew-and-fell or Run-and-fell seams, and by Counter-hem, and hem or stitch; (*b*) reverse the fixing at the cuff, which is turned back to the right side of the garment, so that if sew-and-fell seam is employed, the stuff must be cut a little bit to allow of reversing the folds, for what was double for the right side

of the garment will be a single fold, when fixing the seam on the wrong side of the garment.

N.B.—A great deal of skill is needed to reverse sew-and-fell in fixing, in order to make the seam flat and smooth. If the sleeve is fixed for counter-hem and stitched, the stitching only must be reversed, that for the cuff being worked on the wrong side of the sleeve.

(c) Fix a narrow hem on the cuff, on the wrong side of the sleeve, and neatly hem.

N.B.—When the cuff is turned back, the hemming will be matching all the other hems on the garment.

(d) If there is any fulness at the top of the sleeve, gather it on either side of the elbow crease in the sleeve, $\frac{1}{2}$ an inch from the raw edge; (e) turn down a fold $\frac{1}{4}$ of an inch deep on the right side of the sleeve, so that the raw edge just touches the gathers; (f) turn down on the wrong side of the armhole of the body a fold $\frac{1}{4}$ inch deep; (g) put the seam of the sleeve to the seam of the body of the garment, and the centre of the gathers to the shoulder seam, so that the armhole of the body rests on the sleeve; (h) set in the gathers, and then stitch the edge of the body to the sleeve on the right side; (i) fell on the wrong side, or stitch the edge of the sleeve to the body, the stitching being on the right side.

Waist.—(a) Gather the garment at the waist-line, in two or more rows, being careful to measure $3\frac{1}{2}$ or 4 inches plain from each side seam; (b) set the gathers in the waistband, which must be laid on the garment on the right side, if two rows of gathers are used, the rows being made the depth of the waistband apart from each other, or the waistband may be laid on the garment on the wrong side, if more than two rows of gathers are employed; the waistband then acts as a strengthening tape

to the gathers; (*c*) fix the waistbands at the ends, either in straight lines, or shape the ends like the front fold of a chemise, and before stitching or felling the ends to the garment place the waist-strings under the ends, and then strongly fasten the ends of the waistband to the garment and the strings; (*d*) fix narrow hems on the waist-

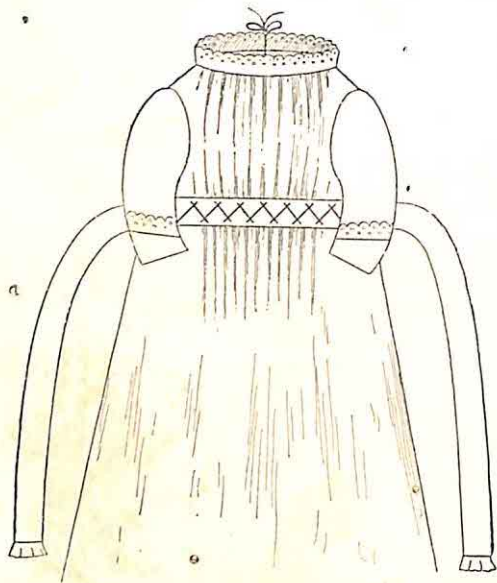


FIG. 209.—Finished Appearance of Fig. 208.

strings, and shape the ends, if liked, and place the wrong side of the strings to the right side of the garment.

Trimming.—(*a*) If lace edging is used more will be needed for the sake of fulness, and it must be sewn to the edges of the neckband, cuffs, and corners of strings, on the wrong side, and must be neatly hemmed at the ends for the neckband and strings, and counter-hemmed at the ends for the cuffs; (*b*) everlasting edging must be hemmed by

its webbing to the garment on the wrong side, and neatly run to the top edges on the wrong side; (c) if feather-stitch or knotting is used on the neckband, it must be worked on the right side of the band before the band is set on at the neck; feather-stitch and knotting make a very pretty ornament for the middle of the waistband.

N.B.—Hand-made, narrow, whipped frills are very pretty trimming for this garment.

Tape.—(a) Hem the ends of the tape to form the neckband string.

N.B.—If the tape is too narrow for hemming, work blanket-stitch over the raw edges.

(b) When the tape has been pushed through the neckband, divide it in half, and then stitch two parallel vertical rows on the centre of the band to secure the tape string.

CHAPTER XV

CHILDREN'S FROCKS—SCALES FOR FROCKS

CHILDREN'S FROCKS

Suitable Materials.—The most suitable materials for young children are washing materials, *e.g.* Mull Muslin or Nainsook, Cambric, Hair Cord, Drill, Print, Turkish Twill for summer wear, and Fancy Twill Flannel, Cricketing Flannel, Flannelette, Serge, and Llama for winter wear. Children's clothing should never restrain their movements, and should always be light and warm, and so constructed as to give free play to the limbs, and allow of growing.

Quantity.—This must depend upon (1) the size of the garment, whether for a baby or an older child, or for girls from 7 to 10 years of age, (2) the material used, and (3)

the style in which it is to be made up. One yard of Nainsook or Mull muslin, from 36 to 40 inches wide, will make a baby's first size frock, with skirt 14 inches long, when hemmed and tucked. A breadth and a half will be needed for the skirt, and the body can be cut out of the

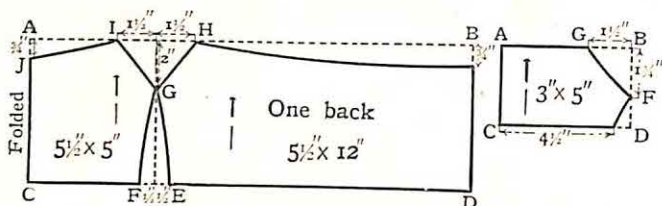


FIG. 210.—BABY'S ROBE BODY.

other half breadth. Print is usually 34 inches wide, so that more than 1 yard will be needed, if the skirt and body are made very full. For the first sized child's smock with long sleeves and yoked neck, 1 yard of 40-inch Mull muslin will be ample. One and a half breadths of 36 or 40 inch

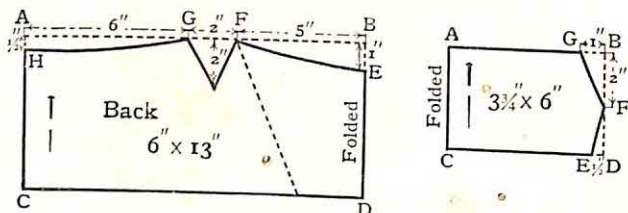


FIG. 211.—BODY FOR BABY'S FIRST SIZE FROCK.

material, 18 inches long, are put into the skirt, and the sleeves and yokes can be obtained from the other half breadth. The length of the smock is increased by trimming of $1\frac{1}{2}$ or 2 inches deep. The yokes are also chiefly made of insertion, the muslin being tucked in strips, and placed between the embroidery insertion. This size smock will fit a child from 12 to 18 months old.

Cost of a Child's First Muslin Frock—

1 yard of Mull muslin, at 1s. 1d. per yard .	1s. 1d.
1½ yards of insertion for the robing of waist and front of skirt, at 5¾d. per yard .	0 8¾
1¾ yards of muslin embroidery edging, at 6¾d. per yard	1 0
¾ yard of Valenciennes lace for the neckband, at 4d. per yard	0 3
Sewing and crochet cotton, tape, and buttons	0 2
	<hr/> 3s. 2¾d. <hr/>

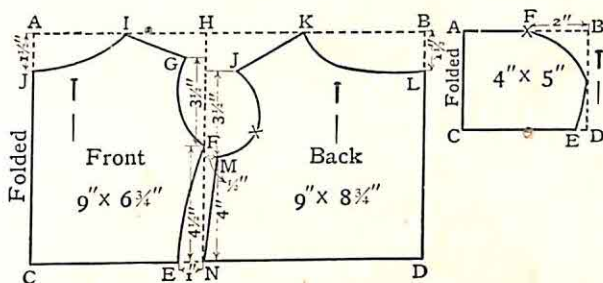


FIG. 212.—INFANT'S FROCK (12 to 18 months old).

Cost of a Child's Smock—

1 yard of Mull muslin, at 1s. 1d. per yard .	1s. 1d.
1 5/8 yards of muslin embroidery edging for trimming the skirt, at 7¾d. per yard .	1 0¾
1 1/2 yards of insertion for yoke and bands of sleeves, at 5¾d. per yard	0 8¾
¾ yard of Valenciennes lace, at 4d. per yard	0s. 3
Sewing and crochet cotton, tape, and buttons about	0 2
	<hr/> 3s. 3½d. <hr/>

Cost of a Print Frock—6 years old (Fig. 216)—

2½ yards print, at 5¾d. per yard . . .	1s. 2¼d.
1 yard of unbleached calico for lining the body and sleeves, at 3¾d. per yard . . .	0 3¾
Sewing and crochet cotton, and buttons, or hooks and eyes	0 3
Piping cord	0 0½
1½ yards of trimming for neck and sleeves, at 2d. per yard	0 3
	<hr/> 2s. 0½d. <hr/>

Cost of a Frock for Child 2 years old, to allow of deep hem and two tucks (Fig. 213)—

1½ yards of Drill, at 9¾d. per yard . . .	0s. 11d.
3¼ " embroidery edging at 4¾d. per yard	1 3½
Sewing and crochet cotton	0 1
Buttons and piping cord	0 1½
	<hr/> 2s. 5d. <hr/>

Construction.—(a) Join a breadth, and a third or a fourth of another breadth, by Mantua-maker's hem; (b) prepare the robing for the front of the skirt thus: lay over the paper pattern at the widest part at the bottom, a piece of muslin embroidery edging, and on this fix by counter-hem a strip of muslin embroidery insertion, and join them by feather-stitch and knotting, then above this a strip of the Mull muslin ornamented by a set of very narrow tucks, and above this a strip of insertion, then another set of tucks, and next a strip of insertion, and another set of tucks with a length of plain material up to

the waistband. Lay at the outer edges of the robing a piece of embroidery edging, rather full, and join the robing to the skirt by a Mantua-maker's hem, and feather-stitch and knot the embroidery edging on the right side, quite through the material; (c) cut down the middle of the back breadth for about a third of the length of the

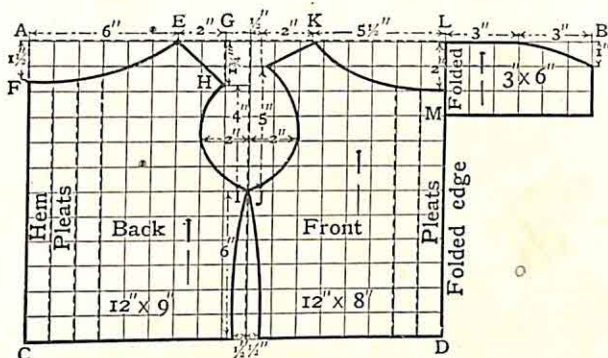


FIG. 213.—(2 to 3 years old). (1) The skirt of the frock must contain two breadths of 34-inch material, and must be 9 inches long when finished. (2) The front breadth must be pleated, and the back one gathered into the waist. No placket hole is required, because the waist is deep, and the garment is large enough to go over the head without any opening in the skirt. (3) The neckband is 16 inches long. (4) Sleeves for children's frocks must always be made large. The diagrams given can be used for linings, and the outer material, though of the same shape, can be cut longer, to allow of fullness.

skirt, and put a broad hem on the right arm side, and a narrower one on the left, and stitch the right over the left; (d) overcast the raw edge at the top of the skirt, and turn down $\frac{1}{4}$ of an inch, and gather through the double material, except across the trimming at the sides of the robing; (e) fix a hem $1\frac{1}{2}$ or 2 inches deep and neatly hem, and place above the hem a set of very narrow tucks; (f) join the backs to the front of the body

(unless the body is made all in one piece) by Mantua-maker's hem under the armholes, fix a hem $\frac{1}{2}$ inch wide on each back; (g) continue the robing up the front of the body, making the bottom of it narrow to match the top of the robing in the skirt, and wider towards the neck, and placing the embroidery edging in a slanting direction from the neck to the waist.

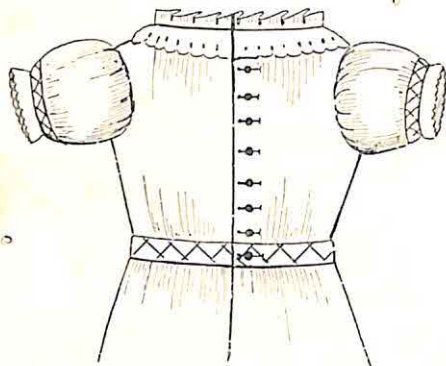


FIG. 214.—FINISHED GARMENT.

N.B.—All the fixing must be done by counter-hem, and the stitches should be feather-stitch and knotting. The waistband must be $\frac{1}{4}$ of an inch deep, on either side of the waist, and $21\frac{1}{2}$ inches long. The neckband must be $22\frac{1}{2}$ inches long and $\frac{1}{4}$ of an inch deep. Both waist and neck bands must be drawn up by narrow tape strings.

(h) Set the sleeve into the armhole by Mantua-maker's hem, after it has been joined in the same way.

N.B.—The sleeve forms the shoulder, and, if any gathers are used at the neck of the body, it must be gathered at the top. But, as a rule, when the front is robed no gathers are employed, but the body is set into a longer neckband, which is drawn up as closely as possible for the child's comfort and warmth. The

embroidery on either side of the waist-front robing is generally carried over the shoulders of the sleeves, and set with them into the neckband.

(i) If the sleeves are not made entirely of embroidery, they

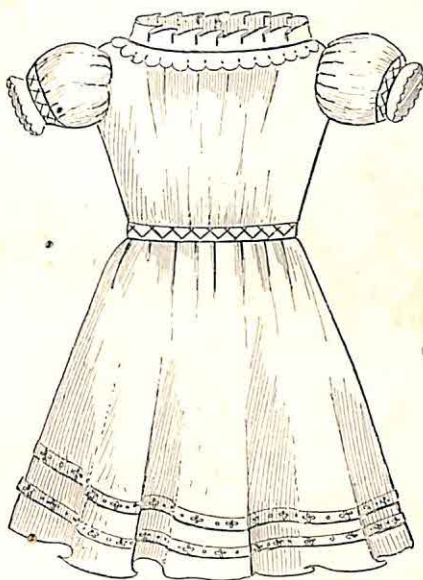


FIG. 215.—FINISHED GARMENT.

must be gathered at the armhole, and set into a band $8\frac{1}{2}$ inches long and $\frac{1}{4}$ inch deep when doubled; (j) sew a pearl button on the middle of the left arm hem, and work a buttonhole on the right arm hem, cutting it in the middle and across the woof; (k) sew on the top of the neckband and the sleeve bands a narrow lace frill.

N.B.—If the frock is made of Turkish twill or print, no robing would be used, and the skirt would be simply hemmed and tucked and gathered into the waistband; the body would be

quite plain, and might be gathered a little at the neck and waist and set into the bands, which must be drawn up by tape strings. All the remaining portion would be constructed as described above, except the robing. The robing for a baby's robe would be the same in shape, only longer and wider. If a child's frock is made of Llama, flannel, or serge, it must be lined. The lining must then be made a little less in width, if necessary, and the Llama or other material must be pleated or gathered before it is lined. Lined frocks are nearly always piped at the edge of the neck and at the top of the sleeves. Hooks and eyes or eyelet-holes are often used on children's frock bodies. Hooks and eyes should be thickly covered with flourishing or linen thread or silk, the same colour as the frock, at the hook and eye portions, and should be strongly fastened to the dress by thickly oversewing the under part of the hook and the ring portions of both hook and eye with strong silk or thread.

SCALE OF PROPORTIONS FOR CHILDREN'S FROCKS

The following scale may prove useful in cutting out different sizes of children's frocks, or in enlarging a pattern that is liked.

Body.—Depth.—(a) Smallest sizes = $\frac{1}{4}$ of the length of the waistband, (b) medium sizes = $\frac{1}{3}$, and (c) larger sizes = $\frac{1}{2}$.

Depth of Body under the Arm.—(a) When the armhole is V-shaped (Figs. 210 and 211) = $\frac{2}{3}$ of the depth of the body; (b) the depth of the V armhole = $\frac{1}{3}$ of the depth of the body; (c) when a shoulder forms part of the body (Figs. 212 and 213) the under-arm seam = $\frac{1}{2}$ the depth of the body.

Depth of the Armhole, in both shapes = $\frac{1}{3}$ of the depth of the body. **Width of the armhole slope** in the widest part = $\frac{1}{2}$ the depth of the armhole.

Length of the Neckband.—(a) High necks vary from 10,

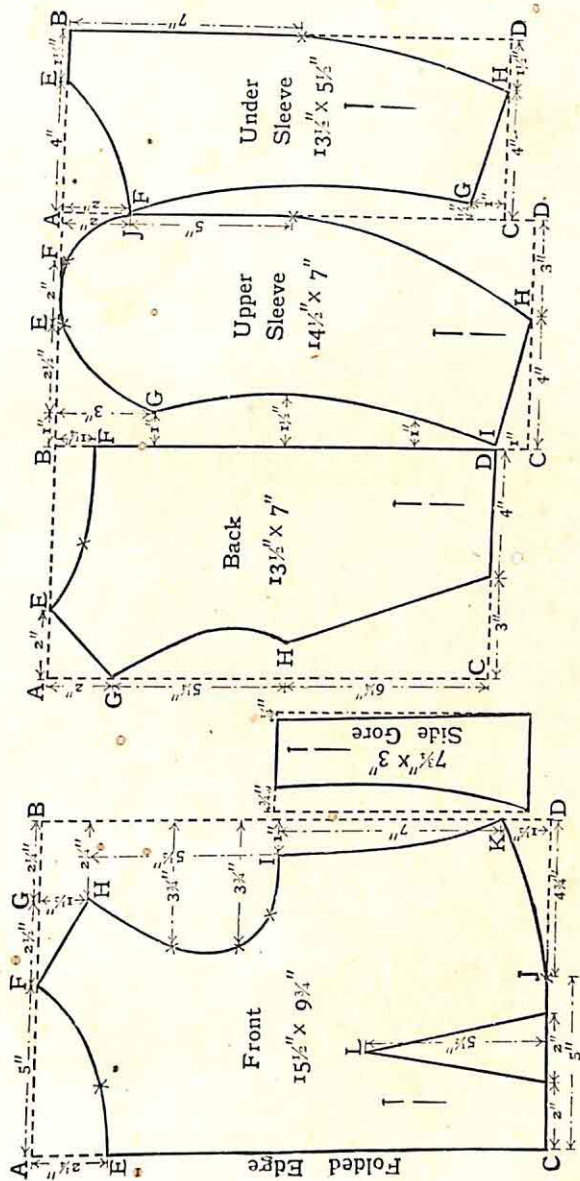


FIG. 216.—GIRL'S FLOCK BODY (6 years of age).

11, 12, $12\frac{1}{2}$, 13, $13\frac{1}{2}$ to 14 inches in length; (*b*) low necks drawn up by strings = a little less than the length of the waistband.

Length of the Waistband.—(*a*) In small sizes, drawn up by strings from 30 to 28 and 26 inches; (*b*) and for older children from 26 to 24 inches.

Sleeves.—(*a*) *Short full sleeves*, the length = $\frac{1}{2}$ the waistband; (*b*) the depth = $\frac{1}{4}$ its own length, or $\frac{1}{2}$ its own length, if preferred deeper; (*c*) *long sleeves* vary in length with length of the arm. A good rule is to make the upper half = the depth of the body from the shoulder at the neck to the waistband, and the under half should be 1 inch shorter.

Skirts.—(*a*) The first short babies' frocks are known as $\frac{3}{4}$ and $\frac{1}{2}$ yard sizes in the length, with $1\frac{1}{2}$ breadths of wide material, and 2 breadths of narrower material in the skirts; (*b*) the next are walking sizes, and must vary with the height of the child—from 10 to 15 inches up to 2 or 3 years old, and from 15 to 18 inches from 3 to 6 years old.

N.B.—The length of the skirt must be modified by the depth of the body, *i.e.* whether it is long or short.

CHAPTER XVI

GIRLS' SMOCKS—DIMENSIONS OF SMOCKS

GIRLS' SMOCKS

Suitable Materials.—Nuns' Veiling, from 40 to 45 inches wide, and from 1s. 6d. to 2s. per yard; spotted or figured muslin, from 36 to 40 inches wide, and from 1s. to

1s. 8d. per yard ; Pongee silk, from 1s. 9d. to 2s. 6d. per yard ; and other soft washing materials.

Quantity.—This must depend upon the height of the wearer, the length and fulness of the sleeves, and the width of the material. From 2 to 3 yards of Nuns Veiling or muslin, double width, will be needed for smocks, suitable for girls of from nine to twelve years of age.

Cost of a Smock—

3 yards of Nuns' Veiling, at 1s. 8d. per yard	5s.	0d.
Sewing cotton and silk, filoselle or flourishing-		
thread for smocking about	0	7
$\frac{3}{4}$ dozen of pearl buttons	0	4
$\frac{1}{2}$ yard of Sarcenet ribbon or galloon for		
lining the neck	0	1
Tapes for holding up the puffing of sleeve .	0	0 $\frac{1}{2}$
2 yards of silk ribbon for bows at shoulder		
and neck, at 5 $\frac{3}{4}$ d. per yard.	0	11 $\frac{1}{2}$
	7s.	0d.

Cutting out the Pattern in Paper for Girls from Nine to Twelve Years of Age.—(a) Take a sheet of paper 20 inches wide and 1 yard long, and fold it in fourths across the width, *i.e.* the length divided into four parts, each 9 inches long ; (b) fold the paper down the length into half, and then into fifths, so that the creases will be 2 inches apart ; (c) open the paper and at one selvedge edge crease from one-fourth up to the top edge to one-fifth crease, in a slanting line, *i.e.* 9 inches long at the selvedge and 2 inches in on the woof ; (d) begin to cut at the one-fifth crease downwards in a straight line for 3 inches, and then curve inside the slanting line, and then outwards to the selvedge, thus forming the armhole. This is all the shape-

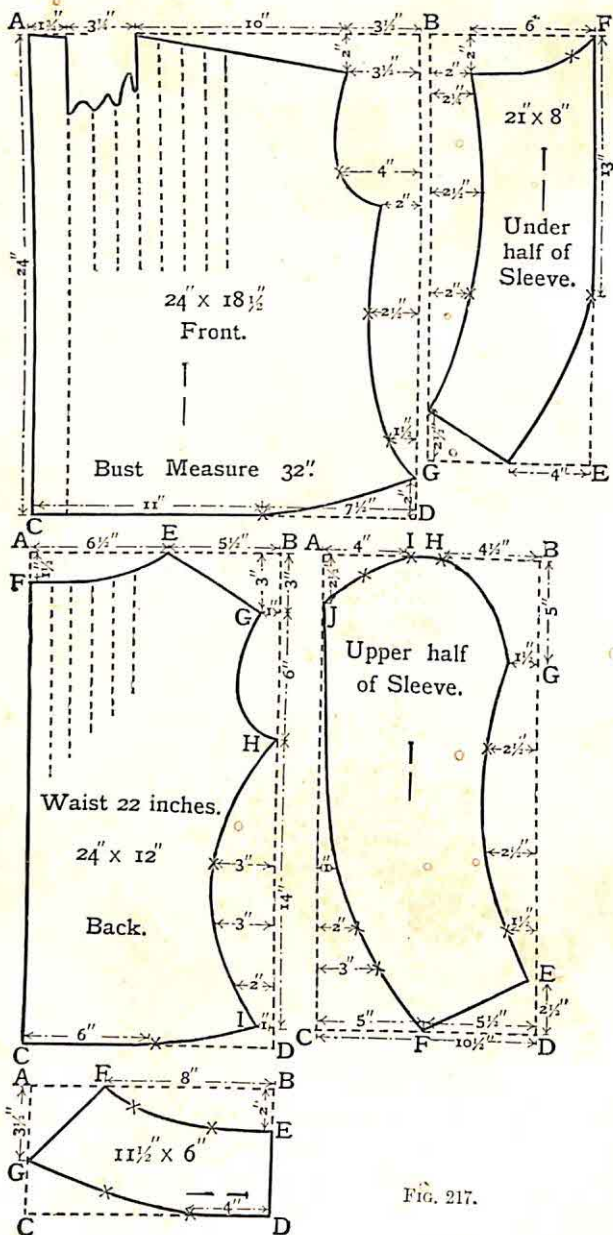


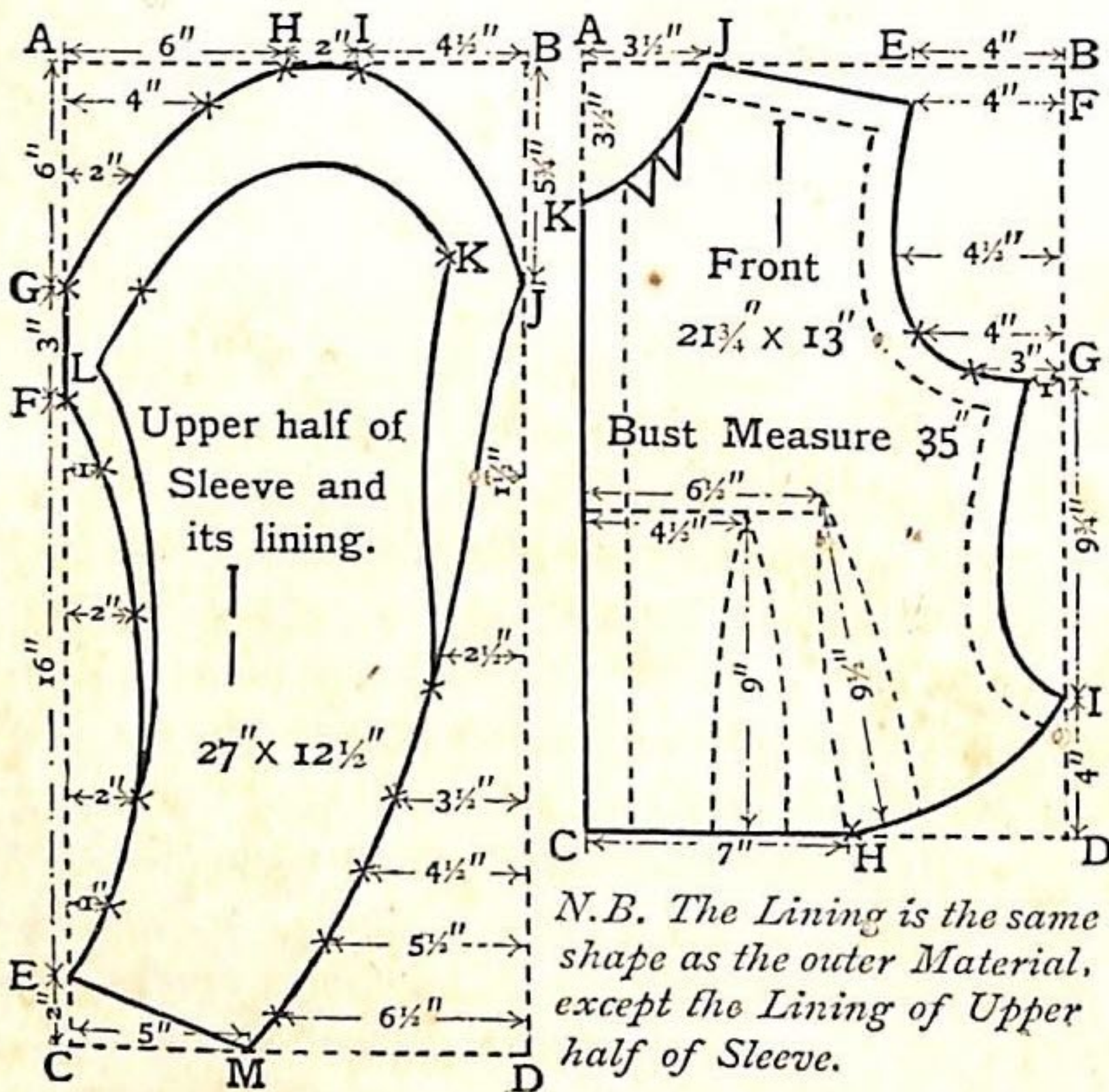
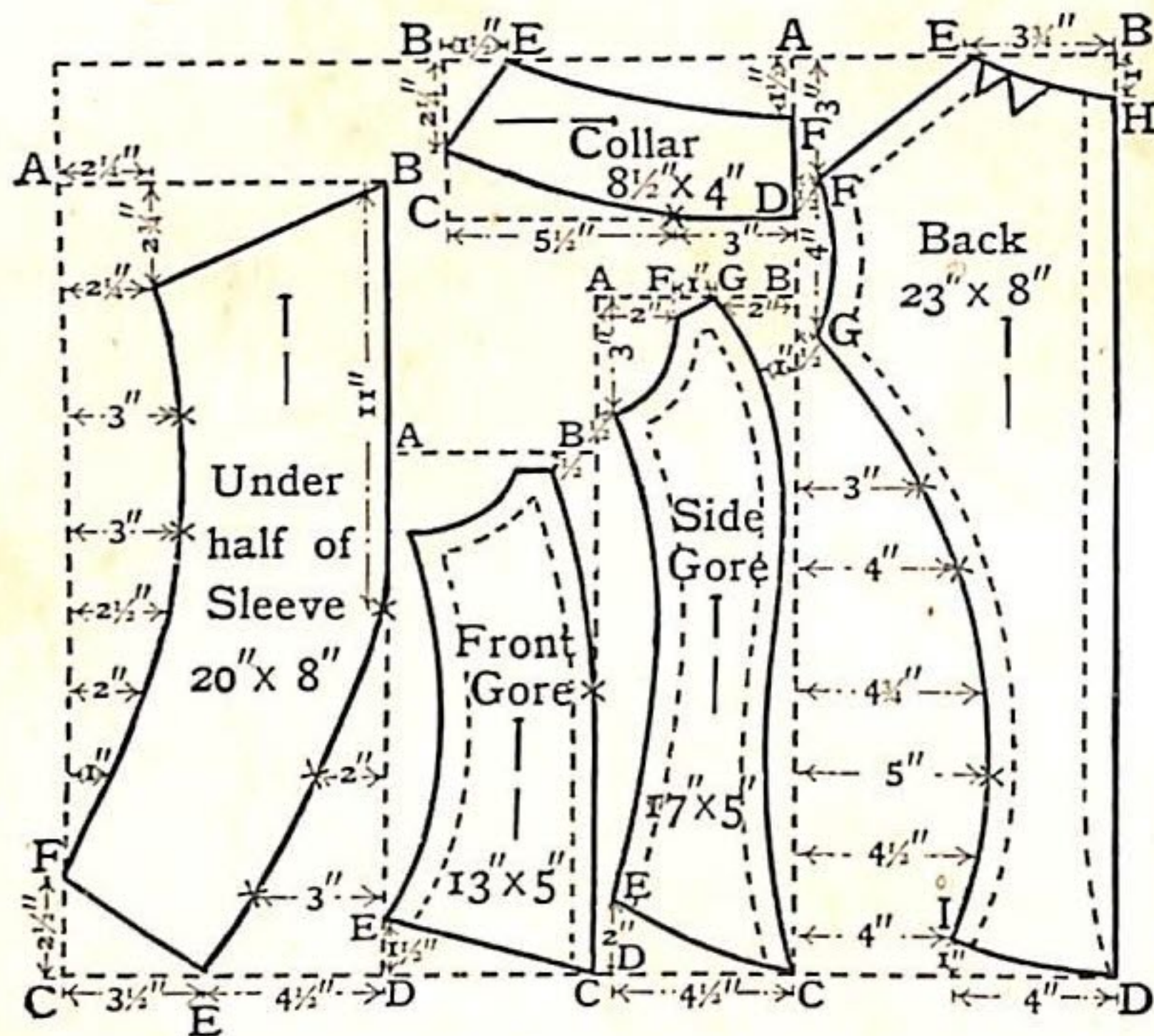
FIG. 217.

ing needed for the garment, as the sides are kept quite straight.

The Sleeve.—(a) Take a piece of paper 22 inches wide, and from 27 to 32 inches long, according to the length of the sleeve, and the size of the shoulder puff required; (b) crease the paper down its length, so that it is 11 inches wide, then divide it again into fourths; (c) fold it in half across the woof, so that, if it is 32 inches long (for a girl of twelve), it will be 16 inches long on either side of the crease; (d) fold the paper from the selvedge edge at the centre crease up to the one-fourth crease in a slanting line for a guide; (e) cut down from this crease 3 inches straight, and then curve inwards and outwards to the selvedge edge for the slope of the armhole.

N.B.—The armhole of the sleeve should be about one and two-thirds of the length of the armhole of the body to allow of smocking it at the same depth as the neck of the garment, and of pleating it into the armhole of the body, to form a big shoulder puff.

Cutting-out and Making-up the Material.—(a) Take two breadths of the material and join the selvedges on the wrong side, by run-and-back-stitch with sewing silk; (b) fix a deep hem, from 3 to 6 inches, according to taste, and either turn the hem up on the right side and pipe it before laying it on the garment, or turn it up on the wrong side, and hem it with sewing silk, and then lay over the hemming stitches on the right side a silk cord, or a band of the material cut on the cross, and piped on either side to form a trimming; (c) when the breadths and hem are finished, fold the garment carefully so that the seams come together, then lay the paper pattern on the seams at the top raw edges; (d) cut out the material from the joined sides in the shape of the paper pattern,



N.B. The Lining is the same shape as the outer Material, except the Lining of Upper half of Sleeve.

FIG. 218.

being careful to keep the tops of the armholes quite straight, for the depth of the smocking required; (e) fold one breadth in the middle, and cut down one half its length, for the back opening.

The Sleeves.—(a) Take the length and width of the material required, and to match the paper pattern; (b) fold the material in half down its length; (c) lay the armhole side of the paper pattern on the open edges of the material and cut out carefully, being again cautious about the depth on the straight; (d) join the straight sides of the sleeve on the wrong side by Mantua-maker's hem (or by bodice seam); (e) then place the right side of the seam to the right side of the seam on the garment, and join by Mantua-maker's hem, or by running and back-stitching the edges together, and then closely overcasting them.

N.B.—The sleeves must be pleated $2\frac{1}{2}$ or 3 inches, just at half the length of the armhole from the top straight edges of the garment, and should be about $1\frac{1}{4}$ inches wide when finished; in all the rest of the armhole the sleeve is put in quite plain. The raw edges of all the seams can be bound by narrow flannel binding. This is both a neat and strong method for all the joins, if they are made by simply putting the raw edges together by run-and-back-stitch.

Fix hems on the top raw edges of the garment, and at the wrists, and at the back opening, before beginning to smock. The hems at the back opening should be from 1 to $1\frac{1}{2}$ inches wide, and should be well lapped at the bottom, and firmly stitched or feather-stitched, and strengthened on the wrong side by a strip of Sarcenet or Galloon.

The Smocking.—(a) Smock the neck from one back hem to the other, and across the top of the sleeves $2\frac{1}{2}$ or 3 inches in depth, smock the wrists of the sleeves for 2

or 3 inches in depth, and at 1 inch below the edge, and

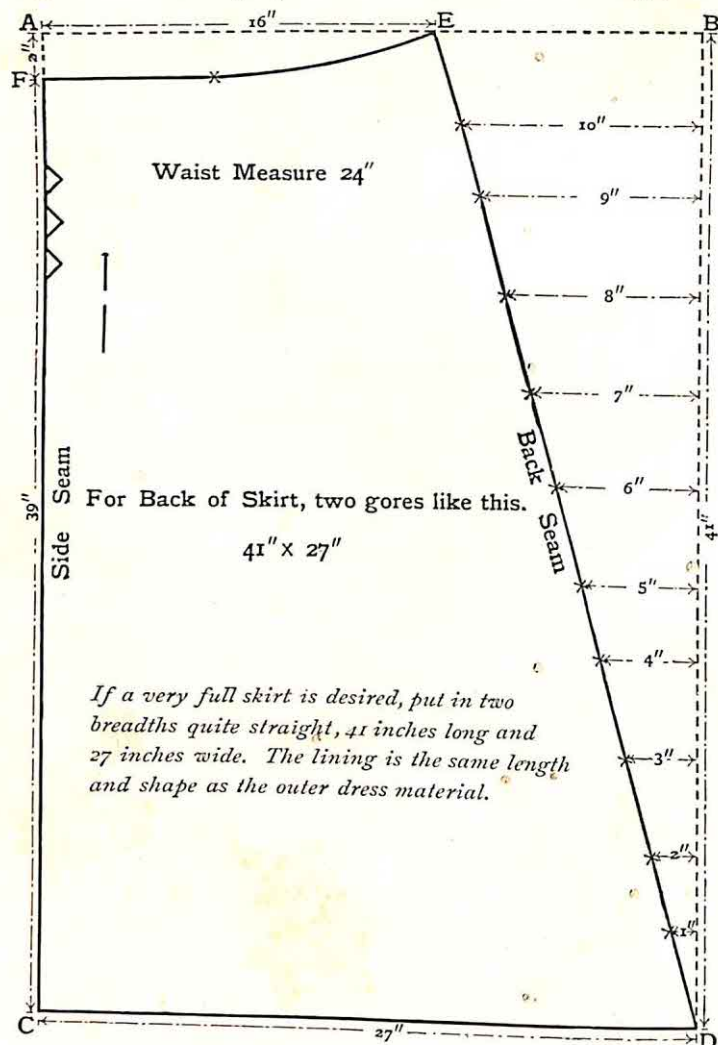


FIG. 219.

across the sleeve just in a line with the under part of the

armhole, leaving four inches plain on either side of the

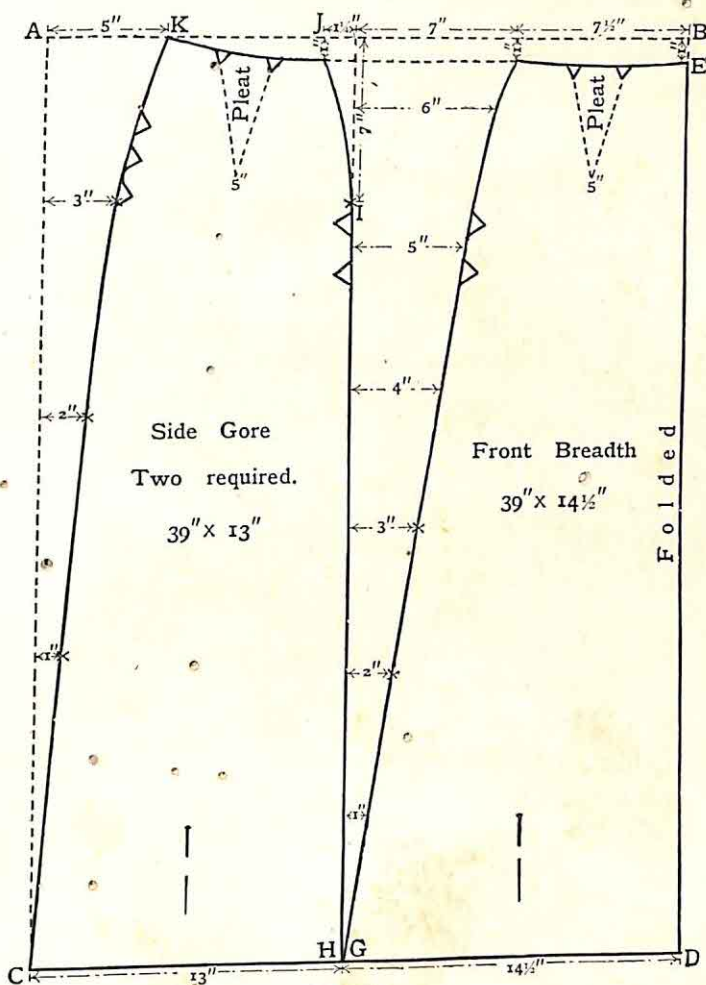


FIG. 220.

sleeve towards the armhole: this is to form the puff on the shoulder (see Smocking). (b) Line the neck with a

piece of wide white silk Sarcenet or Galloon, just below the top frill. The neck must be from $13\frac{1}{2}$ to 14 inches long, when the smocking is finished; (c) sew on 9 pearl buttons on the left arm hem at equal distances from each other, and work 9 buttonholes in silk on the right arm hem, cutting the holes across the woof.

N.B.—The smock generally hangs quite loose from the neck, but is sometimes smocked in the form of a V to the depth of the waist, in the middle of the front breadth. Bows with long ends of ribbon are sometimes placed at the back of the garment to hang in streamers from the neck, and at the shoulders without ends.

Dimensions of Smocks.—(a) SMALL SIZE—

Length of garment.—22 inches.

Breadth.— $1\frac{1}{2}$ breadths of 36 or 40 inch material.

Size round Neck.— $10\frac{1}{2}$ inches, and drawn up by a string.

Sleeve.—Length 9 inches including wristband; whole width of sleeve, 12 inches—that is 6 inches when doubled at the top, and at the wrist 6 inches when doubled, and 4 inches when set into a band, or smocked.

Length of Armhole of Body and Sleeve.— $4\frac{1}{2}$ inches.

Back Opening.— $8\frac{1}{2}$ or 9 inches.

(b) LARGER SIZE—

Length.—From $1\frac{1}{8}$ yards long, including the depth for the hem.

Breadth.—Two breadths of 36, 40, or 45 inch material.

Size round the Neck.—From 13 to 14 inches.

Length of Armhole of Body.—9 inches, and the slope 2 inches, when material is doubled.

Length of Armhole of Sleeve.—To allow of a big puff, about half the whole length of the sleeve.

Sleeve.—Length.—With the same length skirt and armhole of the body, the sleeve may be 27 or 32 inches long.

Width of the Sleeve.—22 inches at the wrist, before smocking.

Slope of Sleeve at the shoulder and the armhole the same as for the body of the garment.

Length of Back Opening.—Nearly half the length of the garment.

DIVISION B

CHAPTER I

HINTS

MEASUREMENTS—FOLDING—PROPORTIONS

1. IN teaching how to cut out a paper pattern by folding, the inch measure is required to mark off the length and breadth of the garment, and it may be used occasionally; to verify the measurements, when certain parts of the garment are either less or more than the proportional divisions which you have made by creasing the paper.

2. You must illustrate your lesson by freehand drawings on a slate, and your pupils should be allowed to mark the creases on their paper with coloured crayons. If a diagram of the pattern has been previously drawn on sectional paper ($\frac{1}{4}$ inch scale) by the scholars, let them lay this in front of them. A large sheet of brown paper, in addition to the slate, is an immense help to the teacher while folding.

3. After a paper pattern has been made, the class must be taught how to employ it to the best advantage while cutting out the garment in calico, or other suitable materials.

4. First obtain the correct length and width of what-

ever garment you intend your paper pattern to represent, and then proceed to discover what part (or parts) bears the nearest proportion to the length or width, or both, and the proper position the part (or parts) occupies. For instance, the armholes of pinafores, when cut in a straight line, equal one-third the length; and when they are curved they are made one inch less than one-third the length. The position they occupy lies in the quarters nearest the open edges of the backs. Again, placket-holes of petticoats are cut near the centre of a back breadth, and are one-third the length of the skirt. From these examples, you will conclude that some garments must be folded with the length into fourths, and across the width into thirds, while others are folded into halves with length, and across into thirds.

5. When both sides of a garment, or part of a garment, *e.g.* yokes, saddles, sleeves, double gores, are alike in shape the paper must be folded to form squares, or double squares; oblongs, or double oblongs; and all the shaping must be carried to the open edges of the paper.

6. (a) Dotted lines represent the creases made by folding; (b) a pin represents the length of the drawing, or selvedge way of the stuff; (c) thick black lines show where you must cut; (d) slanting lines are most useful in regulating the deepest part of curves; (e) the figures give the exact measurements.

CHAPTER II

PINAFORES—APRONS—COOKING SLEEVES (Figs. 221-227)

1. Proportions.—(a) *Pinafores*.—Length depends upon child's height, and whether the garment is high or low in

the neck.* If high in neck, they are fastened by draw-

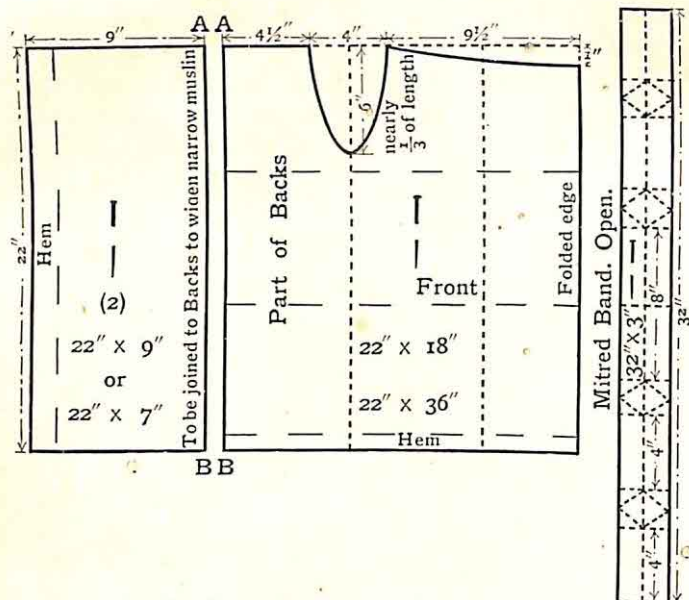
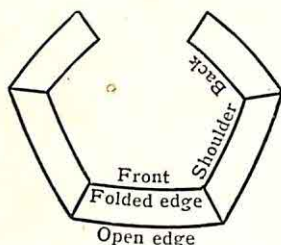


FIG. 221.—CHILDREN'S PINAFORES (5 to 7 years of age).



Mitred Band.

FIG. 222.—MITRED BAND WHEN FINISHED.

strings, and if low they depend from the shoulders by straps. Pinafores should always reach the hem of a child's

* Length as a rule should be two-thirds of child's height. Length of overalls three-fourths of height.

frock. *Width*.—In thick materials, the width should be once and a half the length, and in thin materials, *e.g.* muslin, the width must be twice or twice and a quarter the length. *Neckbands*.—Length equals two-fifths of the whole

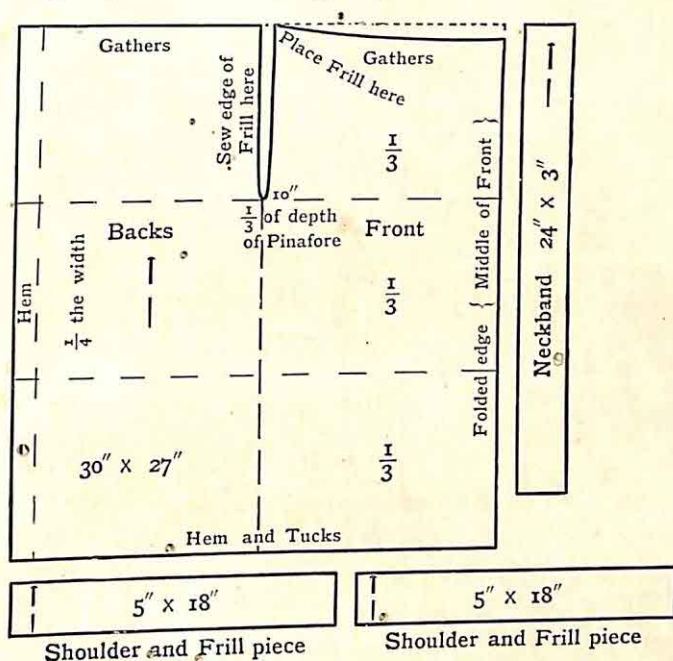


FIG. 223.

width of the pinafore.* If the band is mitred, allowance must be made for the mitres, or slanting folds, which shape the band, making a front, two shoulders, and separate backs out of one piece of material. The depth of neckbands varies. They are narrow when drawn up by strings, and a little wider when mitred.

(b) *Aprons*.—Length of Skirt equals $\frac{1}{2}$ the height of the

* Or half the whole width of pinafore.

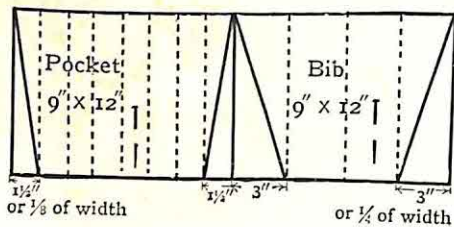
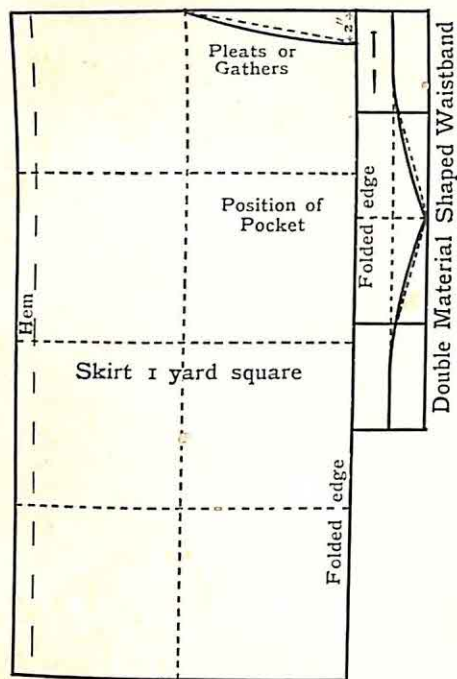


FIG. 224.—WOMEN'S COOKING APRONS.

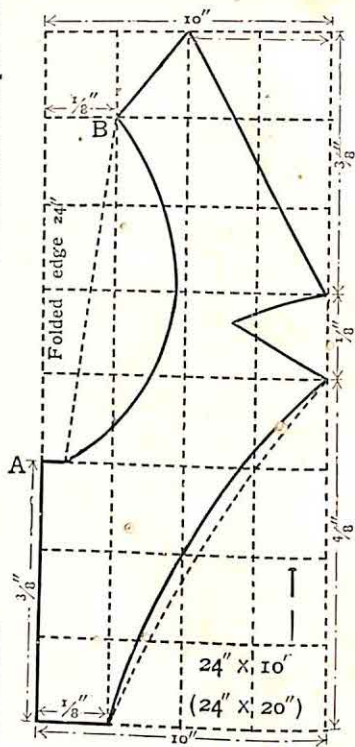


FIG. 225.—ANOTHER BIB.

wearer, after a hem and tucks have been allowed for. *Width*.—Not less than one breadth of wide yarn, or holland, or print; or one and a half breadths in muslin;

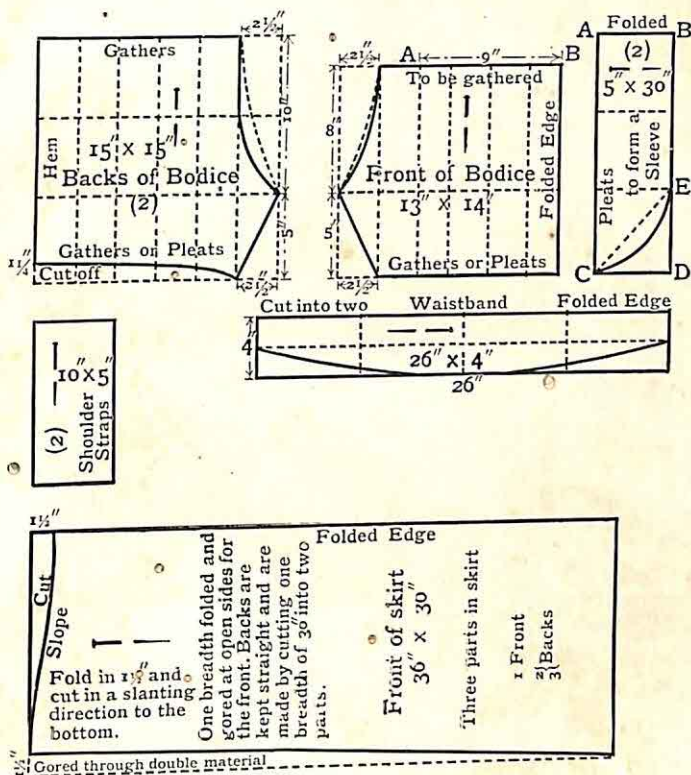


FIG. 226.—COOKING OVERALL (Large Size).

or two breadths so managed as to look like three, according to Cooking Overall, Fig. 226. *Bands*.—Size of waist.

(c) *Cooking Sleeves*.—Length = $\frac{2}{3}$ the length of dress sleeve.

N.B..—This allows of a hem at top for the draw-string.

Width.—Once and a third the length. Fold into fourths both ways of the paper, and cut off at open edges $\frac{1}{4}$ of the half width.

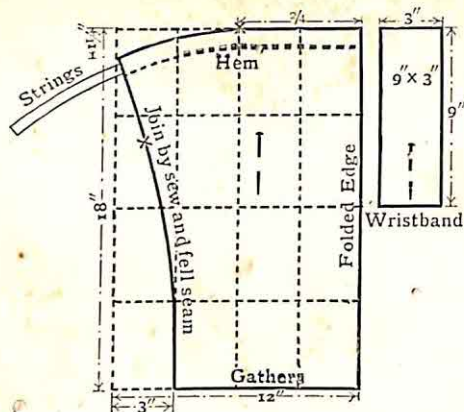


FIG. 227.—COOKING SLEEVES TO BE WORN APART FROM AN APRON.

CHAPTER III

GORED FLANNEL AND WHITE PETTICOATS

CIRCULAR BANDS, PLACKET HOLES, AND DRAW-STRINGS (Figs. 228, 229, 230, 231, 232)

1. **Proportions.**—See lesson in Division A, Part III.
2. **Circular Band.**—A double square of paper $\frac{1}{2}$ the size of the waist, when the band is 4 or 5 inches deep. When it is deeper, add to the size of double square one inch for every two inches of additional depth.
3. **Directions for Folding and Cutting Out.**—(a) Fold the double square diagonally from corner D to corner A.

(b) Measure from D towards B, and from A towards E, B, the depth of the band. E and F in Fig. A represent the depth of the band.

(c) Fold D B and A B to the centre diagonal line C B,

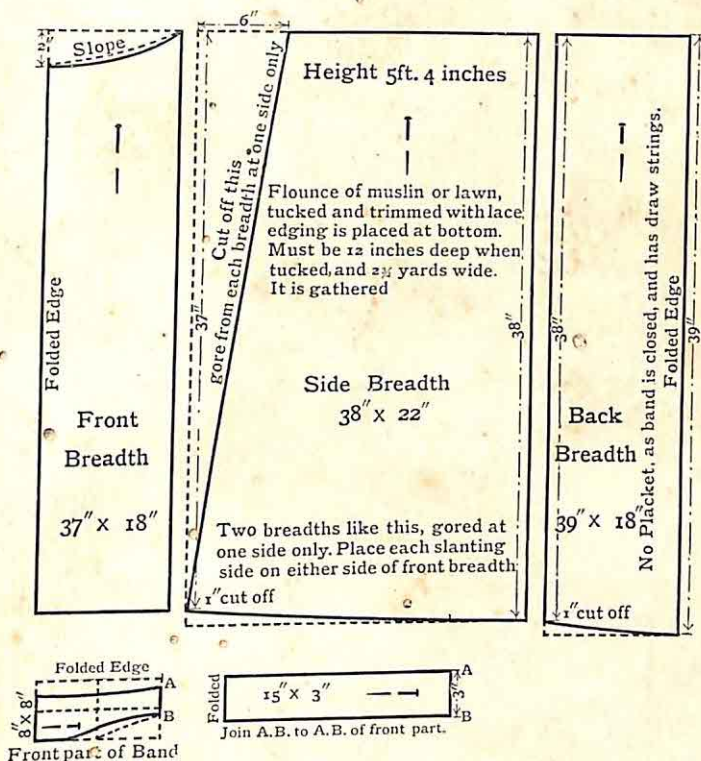


FIG. 228.—A GORED WHITE PETTICOAT (Woman's).

thus obtaining the creases represented by lines G B and H B. Put pencil dots on the centre diagonal the depth of the band from D to E; or from A to F. Next fold D B to diagonal line G B, and A B to diagonal line H B, and

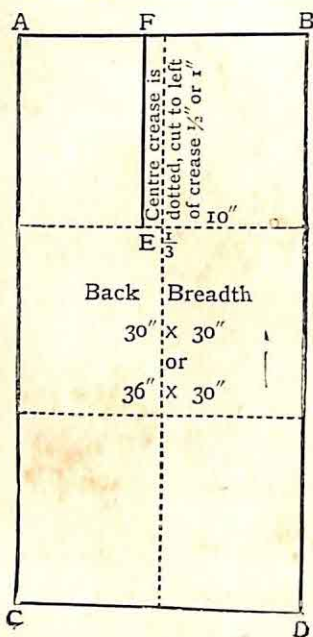
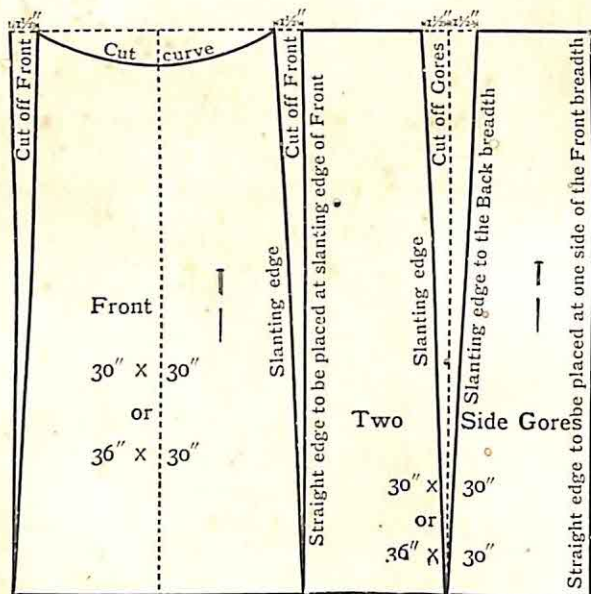


FIG 229.—A GORED FLANNEL PETTI-COAT AND CIRCULAR BAND.

place pencil dots the depth of the band on these lines. Finish marking off the circles by dots on lines J B and I B.

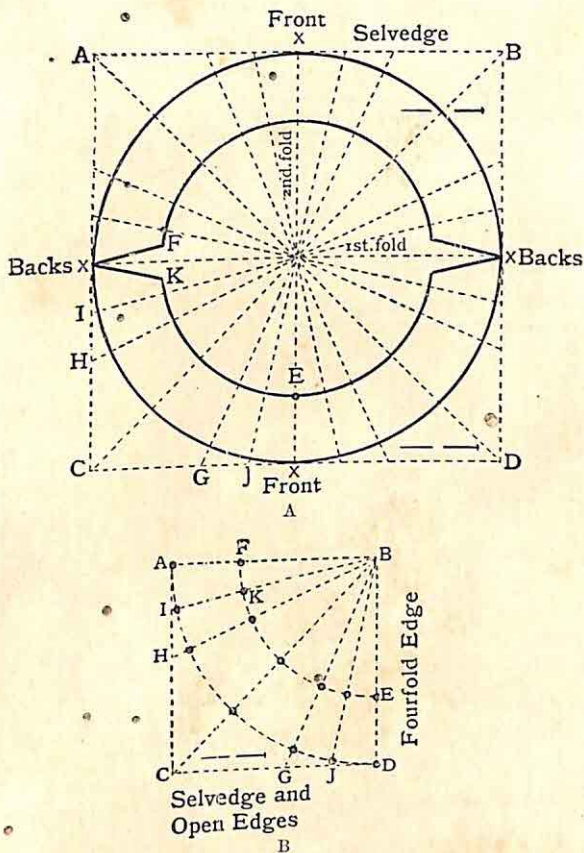


FIG. 230 (A and B).—SHOWING BANDS AND ITS LINING.

(d) Measure in from F one inch, and call this point H. Fold diagonally from A to H, to shape the backs of the band and its lining.

(c) Cut through the material from D to A, being guided by the dots on the diagonal lines; and then from E to H, and from H to A. This will give one band, as represented in Fig. A.

(f) The selvedge way of the material runs the length of the band in front, while the sides and backs are on the cross.

PLACKET HOLES

1. Method.—(a) Fold back breadth of flannel or calico or cloth into halves down the length and mark by a pin;

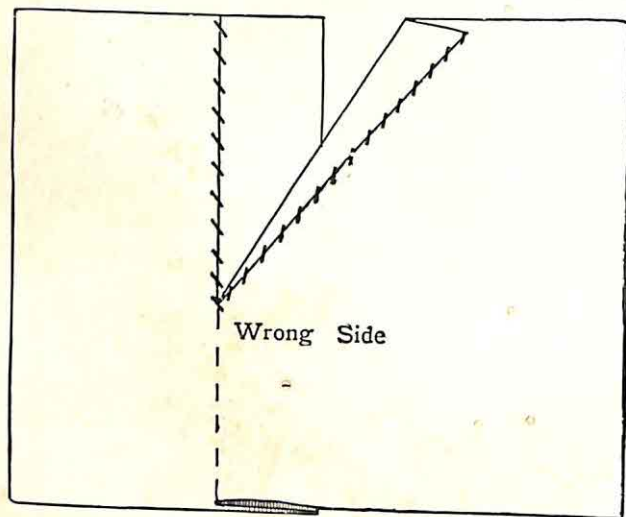


FIG. 231.

(b) measure to the left of the centre crease on the right side of the material, half an inch (or more, if a very wide hem is liked on the right-arm side), and cut or tear till slit is $\frac{1}{3}$ of length of skirt, *i.e.* if a straight waistband, or a narrow circular band is to be worn.

2. *Fixing the Hems.*—(a) Place the wrong side of the garment uppermost; (b) turn down a deep hem on the left-hand side, from $1\frac{1}{2}$ to 2 inches wide, keeping the same width from the top to the bottom of the placket; (c) tack the hem neatly; (d) turn down a narrower hem on the opposite side of the slit, taking this hem off to a point at the bottom of the slit; (e) tack neatly; (f) if the garment is made of flannel, only one fold must be turned down, and the hems must be herring-boned; if a calico, print, galatea, drill, zephyr, or cloth garment, the hems must be neatly hemmed or machine stitched.

N.B.—Petticoats are fastened right over left, so that the wider hem will be on the right hand, when the garment is turned with the right side out.

3. *Finishing off the Placket.*—(a) Buttonhole the end of the slit, on the wrong side of the garment; (b) turn the garment with the right side out, and lap the right-hand side over the left, and stitch it across in two parallel rows, $\frac{1}{4}$ of an inch apart; or, if a flannel petticoat, feather-stitch two rows with flourishing thread.

Note.—Some prefer to turn under a fold of the flannel and hem on the wrong side; and then feather-stitch the hem at both edges, on the right side.

DRAW-STRINGS (Fig. 232)

Method.—(a) Make a string casing by running through the double material of the band, half-an-inch below the top edge, like a hem at the top of a pinafore; (b) on the left-arm side, an inch in from the placket edge of the band, work an eyelet hole in the middle of the casing, and only through single material of band that lies upper-

most; (c) thread a bodkin with tape of a suitable width for depth of string casing, and pass it through the eyelet hole, and bring it out at the right-hand end of string casing; (d) hem the ends of the tape, and stitch through the band and tape at the string casing, in middle of front breadth. This is a good method for the top of a circular band, as it allows of a lap at the waist, and the strings can be tucked under the band.

Another Method.—When bands are closed, they are sometimes made into two parts; the first part being shaped a little, and placed over the front breadth and a little of the side gores (Fig. 228). The other part of the band is made quite straight, and a string casing is run along it, and two

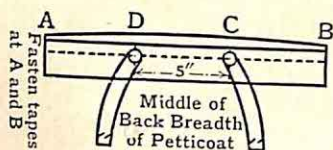


FIG. 232.

eyelet holes are worked, 4 or 5 inches apart on the band, which lies above the centre of the back breadth. The strings are most securely fastened to the ends of this band, before they are joined to the front portion. The tape at right-hand gore is brought out at the eyelet hole farthest to the left; and the one at the left-hand gore is brought out at the eyelet hole farthest to the right. By this method all the fulness falls to the back of the garment.

N.B.—Sometimes drawstrings are used for an entirely straight and closed band, and they are passed through the eyelet holes, all round the band, twice.

CHAPTER IV

GIRLS' AND WOMEN'S CHEMISES—SLEEVES, YOKE,
FRONT FOLDS. FALSE HEMS ON THE CROSS

(Figs. 233 to 244)

1. Neckbands of Chemises.—(a) See scale for the length and depth; (b) when this is settled, you must

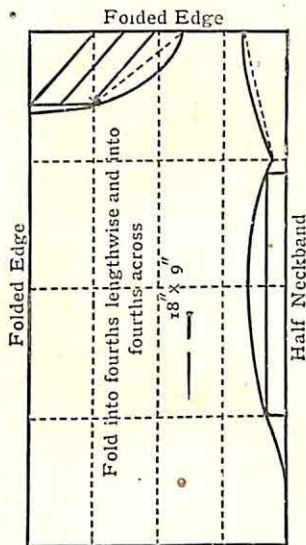


FIG. 233.

divide the neckband accurately, if it is to fit a neck curve made lower in front of the garment than at the back, in the following way:—Make band by folding it into halves down the selvedge way of stuff, and seam the ends; then mark off at the open ends $\frac{3}{4}$ of an inch to $1\frac{1}{4}$ inches in girls' sizes; and from $1\frac{1}{4}$ to $1\frac{1}{2}$ inches in women's sizes (G H in Fig. 234b); then fold band into halves, C D,

and fold C D up to G H, thus producing crease E F (Fig. 234*b*). The longer quarters are for the front of chemises.

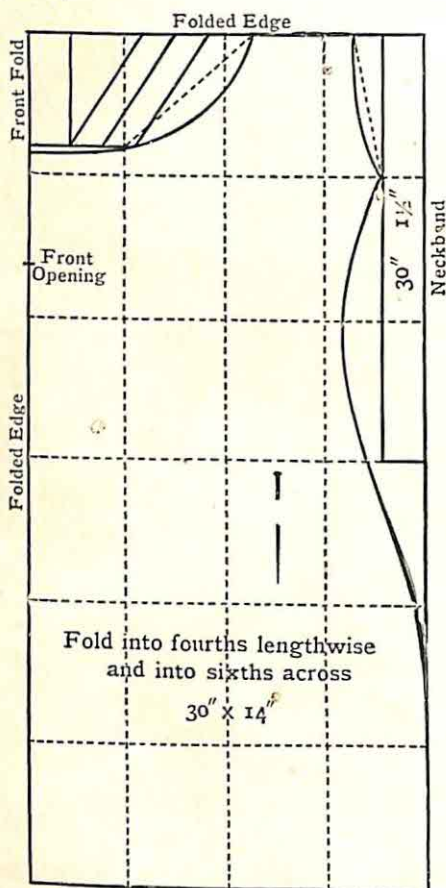
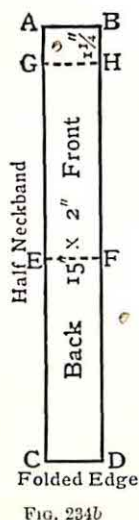
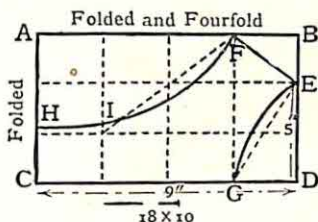


FIG. 234a.



2. Yoke of a Chemise (Fig. 235).—This is a neckband; and can be used for a child's pinafore if left open at the back.

Method.—(a) A double oblong of paper, 18 inches long, and 5 inches deep; (b) fold this again, so that it is 9 inches long and 5 inches deep, and fourfold; (c) fold along the selvedge into thirds, and across the depth into fourths; (d) fold from the first fourth at the open edges, D to E, two-thirds of depth, in a slanting direction, then pencil curve from G to E and cut; (e) fold from E to F (one-fourth from B, and one-third from E) to form shoulder line; (f) fold from F to I in a slanting direc-



For one half Yoke and its lining

YOKES—Back and front
in two halves with
lining (Girl's size,
Women's from 20"
× 12").

FIG. 235.

tion, and pencil a straight line at H a little distance above the $\frac{1}{3}$ crease, and curve round to F. Cut through all the fourfold thickness for neck curve. Open and you will find yoke and its lining all in one piece. The back yoke is made the same, and the joins at the shoulders are made to face each other, so that wrong side is as neat as right side. Joins are the same as for an overall yoke. Fig. 235 is an older girl's size, and is very suitable for the neck of pillow-case cut chemise.

3. **Sleeves of Chemises, when cut apart from the Garment** (Figs. 236 and 237, *a* and *b*).—They are suitable for gored chemises, and for chemises with curved armholes. (a) Take a double square of paper, the sides of which are $\frac{1}{3}$ the width of the calico in the chemise. A woman's size

would be, as in Fig. 236, 24 inches long and 12 inches wide—when double, a square 12×12 ; (b) fold into fourths each way, and fold diagonally each way, then fold

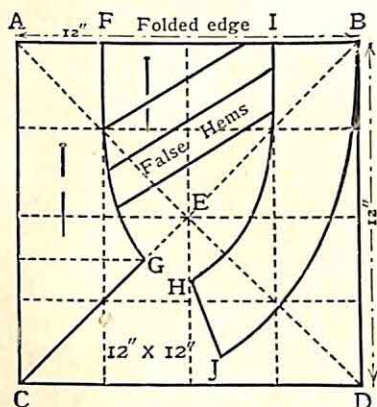
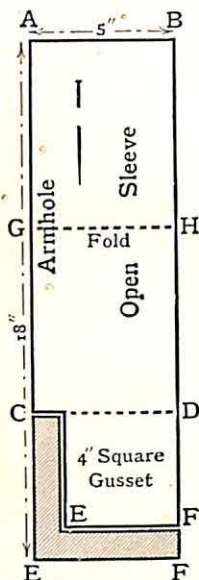


FIG. 236.

Fold into fourths each way; and diagonally from corner to corner of a double square. Cut as drawn. False hems on the cross for lining the armholes must be obtained from the waste pieces.



Cut away shaded part, and fold A.B. to C.D.

E.F. is Gusset.

FIG. 237a.—GUSSET SLEEVE.

diagonal line from C to E into fourths. Top part of sleeve is $\frac{1}{4}$ of whole width, and armhole curve from F to G is $\frac{5}{8}$ of length, and the slanting line, or gusset portion, from G to C is $\frac{3}{4}$ of half the whole diagonal.

N.B.—The opposite sleeve is longer in the armhole, and more curved, from H to I and B to J.

The gusset sleeve (Figs. 237a and 237b) is easily cut and made up. *Proportions of this Sleeve.*—Length, about $\frac{1}{2}$ the

length of chemise. For instance, if chemise is 40 inches long when folded at the top, the sleeve must be 20 inches

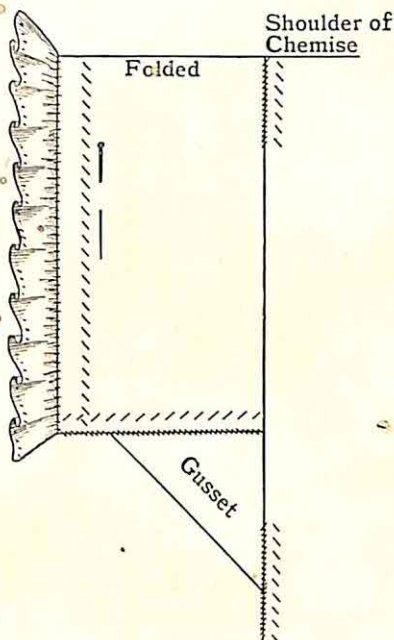


FIG. 237b.

long before it is shaped. *Depth*, $\frac{1}{4}$ its own length, as a rule. The gusset is generally 1 or $1\frac{1}{2}$ inches less than the depth.

CUTTING-OUT A GORED CHEMISE, OR NIGHTGOWN,
BY FOLDING IT PILLOW-CASE FASHION (Fig. 238)

Method.—1. (a) Cut the requisite length and breadth of the material, and fold it across the width in half, firmly

creasing the folded edge; (*b*) open the material again, and fold the two raw edges in towards the crease, thus dividing the length into three parts; the underlying portion being half the length, and each of the two upper portions

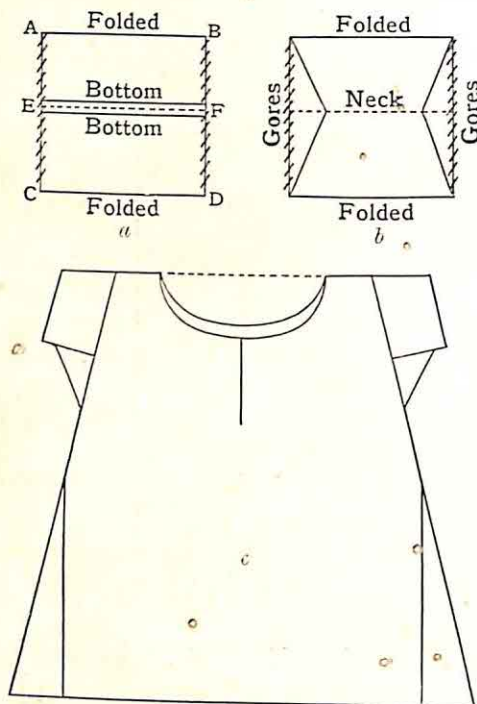


FIG. 238, *a*, *b*, *c*.—PILLOW CASE.

being one-fourth the length; (*c*) tack the selvages together and neatly seam, without puckering, and flatten the seams, when finished (Fig. 238, *a*).

N.B.—In small-size chemises one selvedge side may have raw edges, which must be joined by sew-and-fell seam, or counter-hem.

2. (a) Turn the garment with the raw edges to the desk or table, and with the crease across its width going from right to left, and with the selvedges up and down; (b) measure from the selvedge edges inwards, as many inches as you would like the gore in width, usually from 3 to 4 inches for a chemise, and more for a night-gown; mark the measurement by pins, and crease upwards from them in a slanting direction to the selvedges, and to a point, thus forming four creased lines, two on each quarter of the garment (Fig. 238, b); (c) cut along the four creases to the selvedges, being most careful to cut only the *upper portion* of the material; (d) the creased line across the centre of the material forms the top edge of the garment, which is narrowed, on either side, by the width of the gore; (e) the four short gores fall to the bottom of the garment, and widen it there; (f) the sides of the garment must be fixed for sew-and-fell seam from the bottom upwards to within 9 or 10 inches of the top, if a woman's chemise; or 6, 7, or 8 inches if a girl's (Fig. 238, c).

Another Method of cutting-out a Gored Chemise.—

(a) Take the right length of material, and fold it in half, and well crease the folded edge; (b) divide this into halves across the width, and then open it out again; (c) illustrate on the slate by an oblong, marked at corners A, B, C, D, and at the centre crease, E, F; (d) measure in along the top folded edge from A, 4 inches, and mark G on the illustration; (e) fold the material from G to E in a slanting direction, and bringing the gore to a point at E; (f) recapitulate by measuring from D towards A 4 inches, and mark H on the illustration, and crease to F; (g) show how to cut off these gores, and where to place them from centre crease to the bottom, C D.

N.B.—These gores must be tacked and then seamed to the garment by the straight selvedge edges, separately. Cut the folded portion.

FRONT FOLD

Method.—1. (*a*) Tear the garment down the front, as far as will be comfortable and necessary, allowing $\frac{1}{4}$ of an inch or more to the left side of the garment, according to the depth of the hem on that side of the slit, so as to keep both sides equal for tucks; (*b*) fix the hem on the left side, and on the wrong side of the garment, making it narrower towards the end of the slit; (*c*) tack, and then hem.

2. *Fixing the Front Fold.*—(*a*) Place the front fold on the wrong side of the garment, selvedge to selvedge at the right-hand side of the slit, and tack it as far as the end of the slit, $\frac{1}{4}$ of an inch from the edge; (*b*) run and back-stitch as far as it is tacked; (*c*) take out tacking cotton, and turn the fold over to the right side of the garment, leaving a small portion of it to form the edge, and thus hide the join; (*d*) turn down the raw edge of the opposite selvedge $\frac{1}{4}$ of an inch, and then the bottom; (*e*) crease the fold down its length, and then turn the open edges of the bottom corners over to the middle crease, thus forming two triangles; (*f*) open the fold and turn in towards the centre crease the two triangles, a portion of which must be cut away, to prevent clumsiness at the bottom of the fold; (*g*) illustrate the pointed end of fold; (*h*) tack the fold to the garment evenly and smoothly, pushing the fulness of the garment, caused by lapping the fold over the hem on left side as far as centre crease of the fold, in the form of a pleat; (*i*) stitch the fold to the

garment, or feather-stitch it, after it has been felled on the garment.

- N.B.*—1. The front fold of a nightgown may be fixed in exactly the same way.
2. The front fold of a nightshirt is generally left unshaped at the bottom.
3. Some like a buttonhole in the middle of the front fold.

FALSE HEM ON THE CROSS

Method.—1. *Cutting the Material on the Cross.*—(a) Take as large a square of calico as you can get from the neck sloping of the chemise, and fold it diagonally from corner A to corner B; (b) cut along this diagonal crease; (c) draw a square on the slate, and cross it from corners A to B by diagonal lines, at even distances apart (Fig. 239.)

2. *Depth of Crosswise Hems.*—(a) When Velvet, or Crape, Satin, or Plush, is bought already cut on the cross, it is measured along the selvedges; but in taking what is wanted from the crosswise stuff for trimmings, it must always be remembered that the depth of the material is less from its slanting edge inwards, than it is along its selvedges; (b) the hem of a woman's chemise should be $\frac{3}{4}$ of an inch deep when finished, and $\frac{1}{2}$ an inch more must be allowed for turning to the hem, and for joining it to the garment, so that the depth of crosswise hem must be $1\frac{1}{4}$ inches; (c) measure along the selvedges 2 inches, or from crosswise edge of material inwards $1\frac{1}{4}$ inches, crease this evenly and carefully, and, as more than one piece will be needed, fold the required depths, one above the other, to prevent waste of time in re-measuring; (d) lay left hand on the material, and cut along the creased edges very carefully.

3. *Joining the Crosswise Material.*—(a) Compare the crosswise lengths of material, and find out if the threads

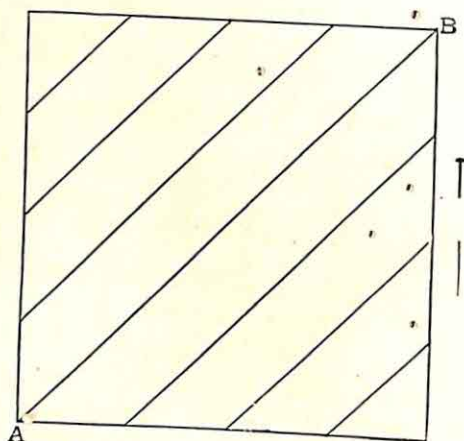


FIG. 239.

are all going in the same direction, either all to the right or all to the left; (b) make ends match, by cutting away

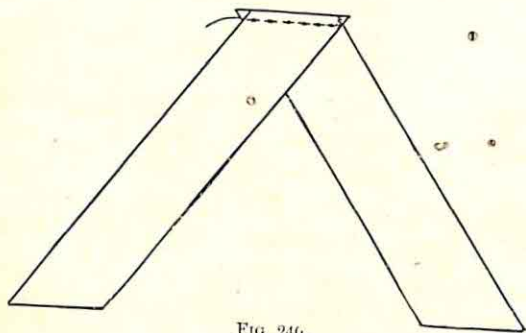


FIG. 240.

any portions of material, which prevent matching; (c) face the two strips of material, and put the long points to the short ones, so as to keep the depth of both pieces the

same when joined (Fig. 240), (*d*) run and back-stitch the strips together, $\frac{1}{8}$ of an inch below the edges; (*e*) turn back the upper strip, and press the seam (Fig. 241).

N.B. — In calico, the seam should not be opened, but in Velvet, Crape, Cloth, the join should be flattened, damped, and then pressed with a hot iron.

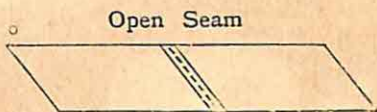


FIG. 241.

4. *Fixing False Hem and Embroidery Trimming to the Chemise Sleeve.*—(*a*) Join the embroidery, by counter-hem and hem or stitch; (*b*) gather it to the required fulness;

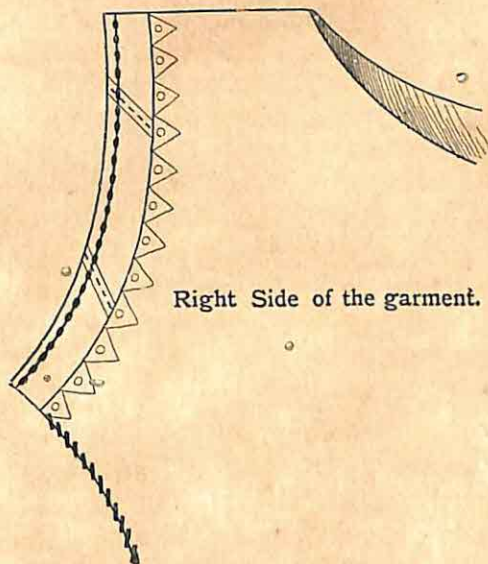


FIG. 242.

(*c*) place the join in the trimming to the sew-and-fell seam of the garment; (*d*) lay the right side of the embroidery on the right side of the garment, regulating

the fulness, and fitting it exactly into the curved portions of the armhole; (e) put in a few pins to keep it in place; (f) lay the right side of the false hem on the wrong side of the embroidery, stretching the material to make it fit into the curves, and putting tiny pleats, if stretching is not sufficient to allow of its fitting the

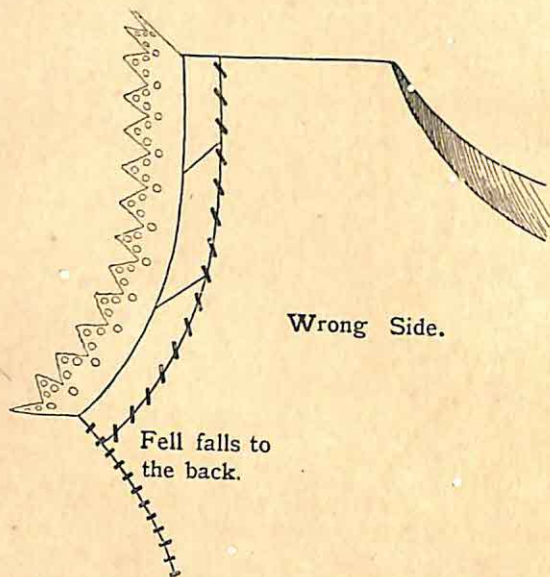


FIG. 243.

garment evenly and smoothly. The last join in the false hem must match all the other joins in it, and no join in the hem should come on the sew-and-fell seam, or it will be made too thick and bulky (Figs. 242 and 243).

N.B.—The garment must not be fulled in the least, nor must the false hem be pleated too much, or it will not lie flat and smooth on the wrong side.

(g) Tack all three thicknesses together, taking out the

pins, and then run and back-stitch firmly and securely ;
 (h) when this is finished, take out the tacking cotton, and
 turn the false hem on to the wrong side of the garment,
 drawing a little of the garment over with it, so as to

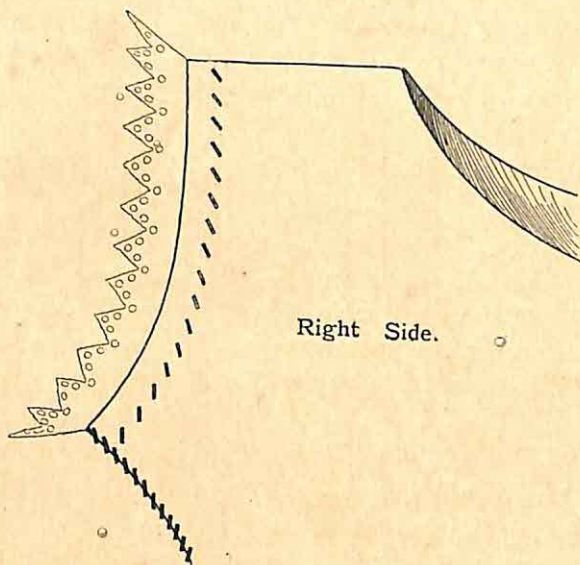


FIG. 244.

keep the join on the wrong side ; (i) press the edge well
 to flatten it, and then turn under one fold, being careful
 to keep the hem even in depth, tack and hem neatly ;
 (j) the edge of the armhole can be ornamented with
 feather-stitch, on the right side of the garment.

CHAPTER V

COMBINATION GARMENTS AND A PAIR OF
KNICKERBOCKERS (Figs. 245, 246, 247)

Suitable Materials.—The same as for chemises and drawers.

Quantity.—This must depend upon the height of the wearer and the width of the stuff. Girls do not, as a rule, begin to wear combination chemise and drawers till they are over ten years of age. For women's combinations, 2 to 3 yards are necessary.

Cost of One, Medium Size—

2½ yards of calico at 7½d. per yard . . .	1s. 6¾d.
Sewing and crochet cotton . . .	0 1
2¾ yards of trimming for neck-band, leg-	
bands, and sleeves, at 4¾d. per yard . . .	1 1¼
Tape and buttons, about . . .	0 1½
	<hr/>
	2s. 10½d.

Cost of One in Unbleached Calico—

2½ yards of calico at 4¾d. per yard . . .	1s. 0d.
Sewing cotton, tape, and buttons, about . . .	0 1
2¾ yards of trimming at 1d.	0 2¾
	<hr/>
	1s. 3¾d.

Construction.—(a) Join the seams of the legs of the

drawers by Sew-and-Fell, or Run-and-Fell, or Counter-Hem, or German Hem ; (b) gather the legs into bands from 14 to 16 inches long, and $\frac{3}{4}$ of an inch deep, when doubled and all turnings are taken (as described in making up children's drawers), leave a plain space on either side of the leg-seams, to prevent the garment from dragging at the knees ; (c) gather the embroidery, and place it between the divided leg-bands, or whip the trimming and set it on with a little fulness ; (d) fix hems on the back part of the legs, and neatly hem, and put on a false hem, one inch wide, on the front part of the legs and the chemise portion (see false hems on the cross), and neatly hem on the wrong side, or stitch on the right side ; (e) join the backs of the garment together by counter-hem fixing, and stitch both edges on the right side.

N.B.—Sew-and-fell, or any of the other methods of joining can be used, but counter-hem sits nice and flat.

(f) Join the sides of the back of the garment to the side slopes of the front, to match the fixing of the centre of the back ; (g) gather the back portions of the top of the legs, just $\frac{1}{4}$ of an inch below the top edge, and the second row of gathers 1 inch below the first row of gathers, and lap one leg over the other, for about $1\frac{1}{2}$ or 2 inches at the centre seam of the back of the chemise, when fixing the leg to the waist ; (h) lay the lower part of the back of the chemise on the drawers, for about 1 inch in depth, so that it forms a kind of band ; (i) turn to the wrong side, and turn under the top of the drawers for $\frac{1}{4}$ of an inch, and set these gathers in to the back of the chemise ; (j) join the sleeves to match the joins in the body ; (k) fix the sleeve on the chemise by counter-hem, and stitch both edges on the right side, or hem them.

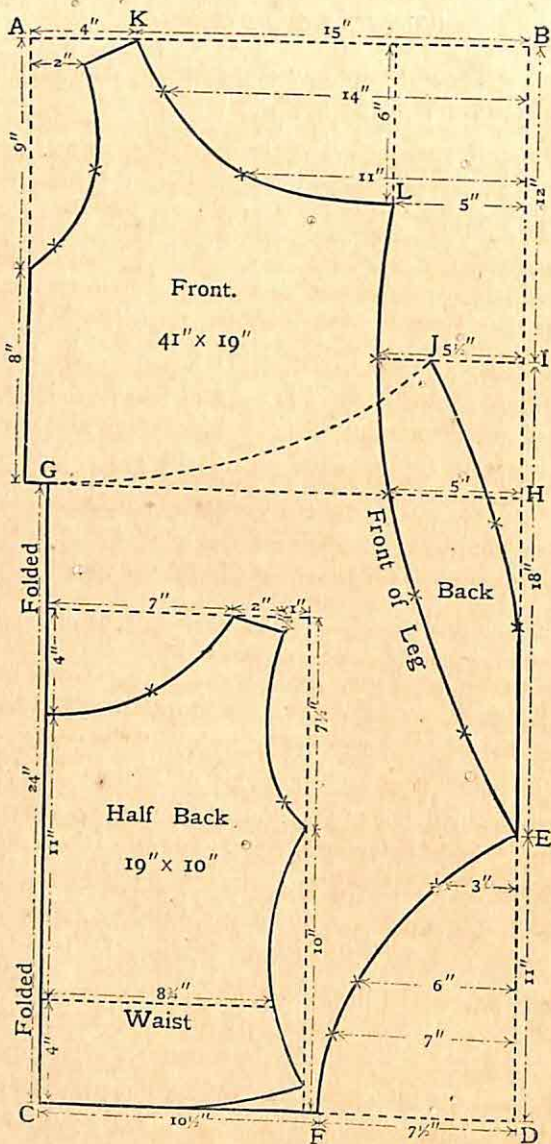


FIG. 245.—WOMAN'S COMBINATION. (1) The Neckband must be cut according to the scale given for Women's Chemises. (2) The Half Back is placed on the leg pattern for convenience of arrangement. (3) Legband is 16" x 2".

N.B.—The hem of the sleeves can be formed by the plain material of the embroidery, or by a false hem on the cross, with the embroidery between it and the garment. The neckband can also be formed by the embroidery, which must be put on quite plain and by counter-hem fixing, and stitched at the top and bottom edges, leaving the ends unfastened to allow of a tape string to draw up to the proper size. The embroidery or the band, which may be put on as for an ordinary shaped chemise, must be for a woman from 34 to 36 inches long for a medium-size bust measure. The neckband, if put on without trimming, should not exceed $\frac{1}{2}$ inch in depth, and should be stitched along the centre to form a string-casing. The tape-string must be secured by two parallel rows of stitching on the back part of the neckband.

(*l*) Sew on six or more buttons on the left arm broad hem of the chemise, and work six or more buttonholes on the right arm hem, cutting them the woof way, *i.e.* across the hem; buttons and buttonholes should be about 2 inches apart.

N.B.—If the combination is a pattern with breast-pleats, these must be joined by counter-hem fixing, and stitched on the right side. There are other ways of constructing combinations, but the above is the simplest, and is very suitable for flannel and flannelette materials. Calico garments are often elaborately made up in the front portion of the chemise. The diagrams given will allow of tucking, if insertion is let in, and if two or more inches of the material are added to each side of the front, from the neck as far as the waist of the garment.

DIRECTIONS FOR CUTTING-OUT GIRL'S COMBINATION

(Fig. 246)

1. Take a double oblong, 33 inches long and 14 inches wide, when folded at the top and one side; (2) fold down the length into fourths, and across into eighths; (3) observe that armhole slope and width of shoulder require a little

more than $\frac{1}{4}$ of the 14 inches (A N O); that neck occupies

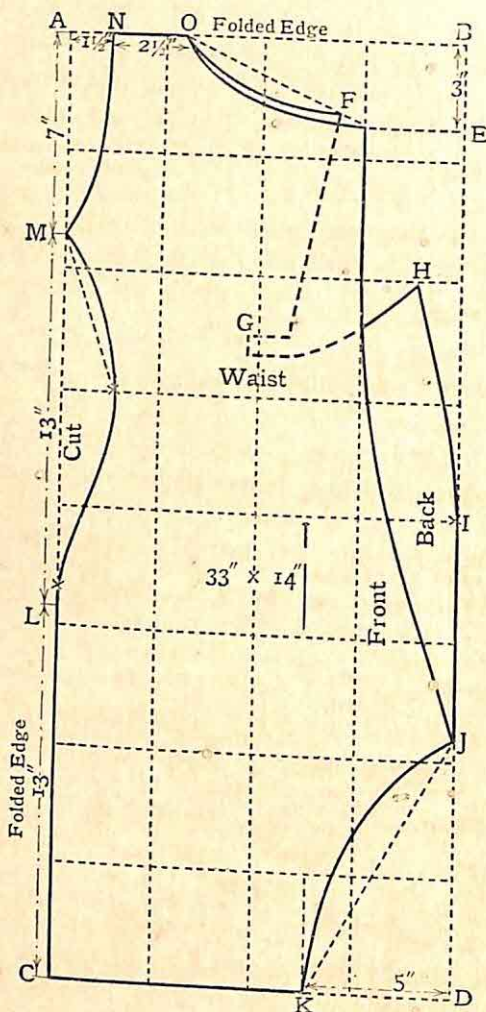


FIG. 246.

nearly $\frac{3}{4}$ of width, and is nearly $\frac{1}{8}$ in depth; that slope of leg requires $\frac{3}{8}$ of width at bottom, and $\frac{6}{8}$ of the whole

length, and so on ; (4) pencil in the pattern on the paper, the front portion first ; (5) turn paper over, and mark off the back of the pattern, in keeping with dotted lines (F G H) and F O for neck ; (6) cut the armholes, side curves, and leg curves through the double paper, but cut neck, back of drawers, and front of drawers, back of body to the waist, separately ; (7) the sleeve may be formed of embroidery, or any of the diagrams given with chemises. The neck-band may be a piece of material on the cross, and draw-strings can be used. See above description for full construction.

Proportions of Combinations.—*Length.*—Measure from the shoulder, near the collar of dress, to below the knee, and then multiply by two. *Width.*—In widest part of leg is, as a rule, $\frac{7}{8}$ of length before multiplying by two. The width can be less or more, as required. For other proportions consult the scales for chemises and drawers.

N.B.—The curved sleeve, Fig. 236, is suitable for a combination.

A PAIR OF KNICKERBOCKERS FOR OLDER GIRL, Fig. 247
(16 to 18 years of age. Height, 5 feet 3 inches)

Proportions.—*Length.*—Including depth of waist and leg bands, $\frac{1}{2}$ the wearer's height. *Width.*— $1\frac{1}{3}$ of the length. See scale in Division A.

Method.—(a) Fold the whole width into halves down with the selvedge, and fold again, in same direction, into fourths ; (b) fold across into eighths ; (c) fold in slanting direction from F to G for leg curve, and E to L for back curve, and E to H for waist-line, and pencil as drawn, remembering the leg has a back and front part to it. Cut

darts in front, and join these in calico by counter-fells. No gathers or pleats are needed in the front of this pattern.

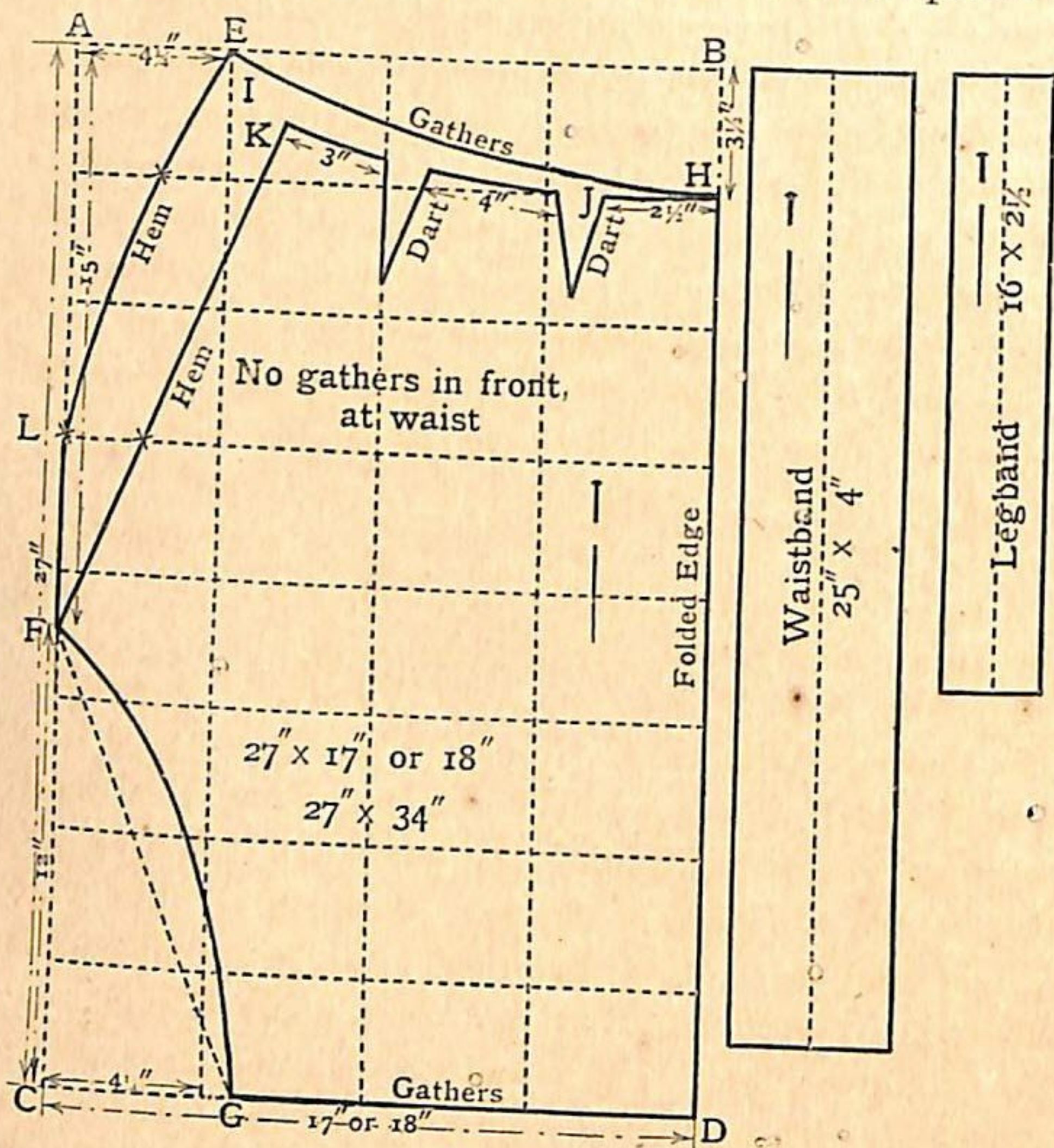


FIG. 247.

CHAPTER VI

WOMAN'S NIGHTGOWN WITH SADDLE (Fig. 248)

(1, 2, 3, 4, 5, 6, 7)

1. Body. — If the garment is 54 inches or 56, or even 60 inches long, you must multiply the number by

two, and fold it to make double material. Press this top fold well, and on one side only take off a gore 6 inches wide at the top and 2 inches wide at the bottom. Put the gore upside down, *i.e.* 6 inches to widen the bottom, and 2 inches at the top, so that you only narrow the top by 4 inches, and the bottom is only widened by 4 inches. The armhole curves will be the same size for all materials from 36 to 44 inches wide, supposing the sleeve is once and a half the collar length.

2. **Sleeve.**—Take a single piece of paper 24 inches square, *i.e.* once and a half the length of the collar. This sleeve will need no wristband, but is lengthened by trimming. Fold the paper into eighths each way, and open it out, and mark creases in two different coloured crayons. Keep the lines running vertically, if you use lined paper. Mark off $\frac{3}{8}$ from A to E and from A to F, and fold diagonally, then mark curve as drawn from E to F. Mark off $\frac{2}{8}$ from B to H and B to G, and fold diagonally, and then mark curve as drawn, continuing the curve till you reach F. This is the top part of sleeve. Mark off $\frac{5}{16}$ from C to K, and fold in slanting direction. Whilst so folded, lift this side over to line B D, and place point E on H, and press the paper well. Open and you will find the slanting crease I J. This puts the sleeve on the cross, and helps to give the under and upper divisions of it. Mark off the points L and J, when you place E K to H. Cut the lines, keeping true diagonals and good curves.

2. **The Saddle.**—Use a double square of paper $\frac{1}{2}$ the length of the sleeve. Fold it into fourths each way, and well crease and mark with crayons, while you are learning how to do it. Place paper with folded edge towards you, and to represent the selvedge going vertically. Then fold paper from corner C to centre crease O, in a slanting

Whole length from 54" to 60" inches,
and width from 36" to 44" inches.

Folded edge } to be cut into two

Material not less than 36" wide.
More in width, if possible.

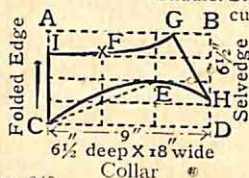
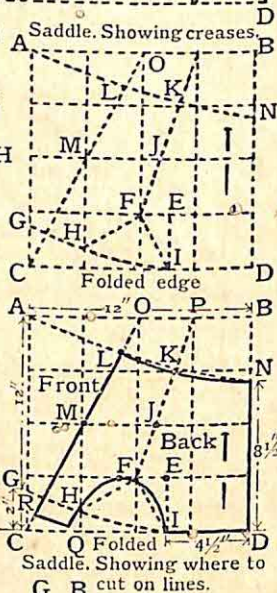
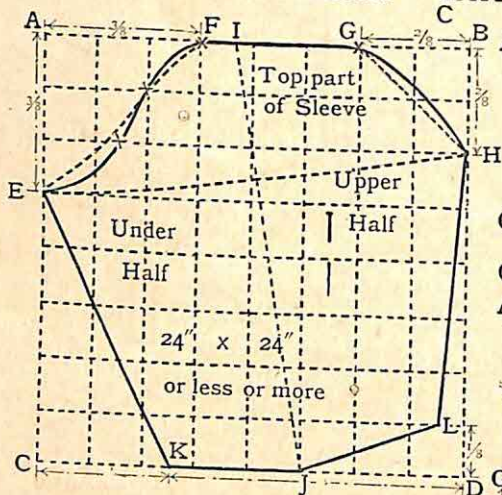
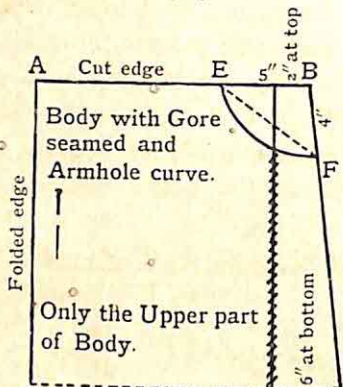
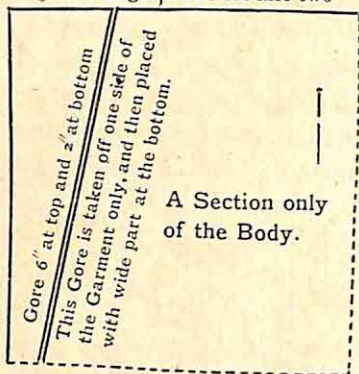


FIG. 248.

direction. This crease fixes the position of *front* bottom edge, which is cut on the bias. From D to I is $\frac{3}{8}$ of the width, and determines the depth of the yoke at back. D to I remains folded. Dot a line to E or crease the second fourth into halves. Put a dot at F and fold from it to I diagonally. This gives you the back neck. Draw a

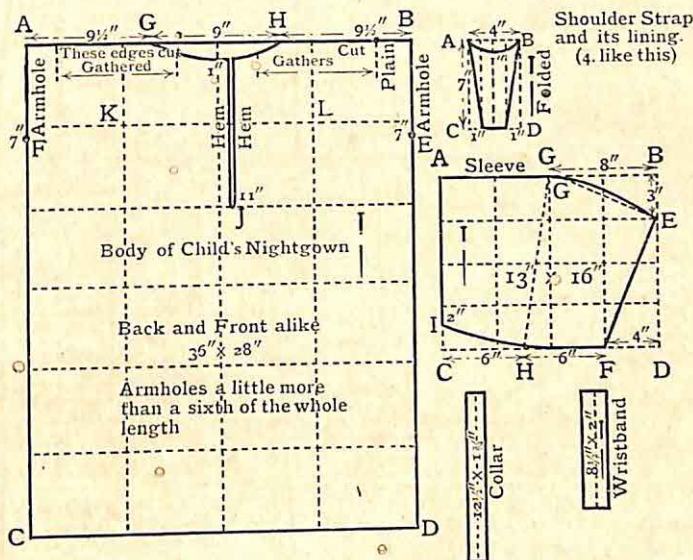


FIG. 249.—CHILD'S NIGHTGOWN.

curve from F to I. Now fold from I to G diagonally, and from F to H, *i.e.* where the diagonal line crosses the first vertical fourth; and draw a curve from F to H, and beyond it. This gives the neck of *front*, which is longer than that of the *back*. Mark off from D to N the length of back ($\frac{1}{2}$ length as paper is folded). The length may be the same as collar, or once and one-eighth of collar length. Now fold from F to P, the first fourth in from B. This

gives shoulder line, which is also on the cross. Draw a line from N to K, for back armhole of the saddle. Fold from N to A diagonally, and where this line crosses the diagonal C O, it determines the length of the front of saddle. The front is longer than the back of saddle. Draw curve of front armhole from K to L. Cut from N to L for armhole; from I through F and H to Q for neck; from Q to R for front opening; and from R to L for the front edge. Fold paper, and bring line F K towards the front. The yoke or saddle must have a lining, the exact shape of itself. If yoke is liked deeper, then the double square must be enlarged every way. The front must be made longer than back to allow for fastening the right hand side over the left.

3. **Collar-Band.**—A collar-band must be used first, and must be made the size of the neck + 4 inches for lapping and looseness. 17 inches long by 3 inches wide will suit this size nightgown. It must be divided into two parts, lengthwise, because collar is placed between its edges, and falls back over the saddle.

4. **Collar.**—Take a piece of paper $6\frac{1}{2}$ inches selvedge way, and 18 inches wide for collar pattern. Fold it into halves, and then into thirds, down with selvedge (lines). Fold it across its width into fourths. Then fold from C to E, $\frac{2}{3}$ in width, and half the depth, and draw curve from C to E. Fold diagonally from E to H, and from H to G, and from G to F. Curve neck from G to I. Finish curve from E to H, and then cut through double paper as drawn. This collar is made of single stuff.

CHAPTER VII

MAN'S FLANNEL UNDER-SHIRT OR VEST
(Figs. 251 and 252)

THIS garment is worn under the ordinary shirt, and always has short sleeves, or sleeves to the elbow. Make

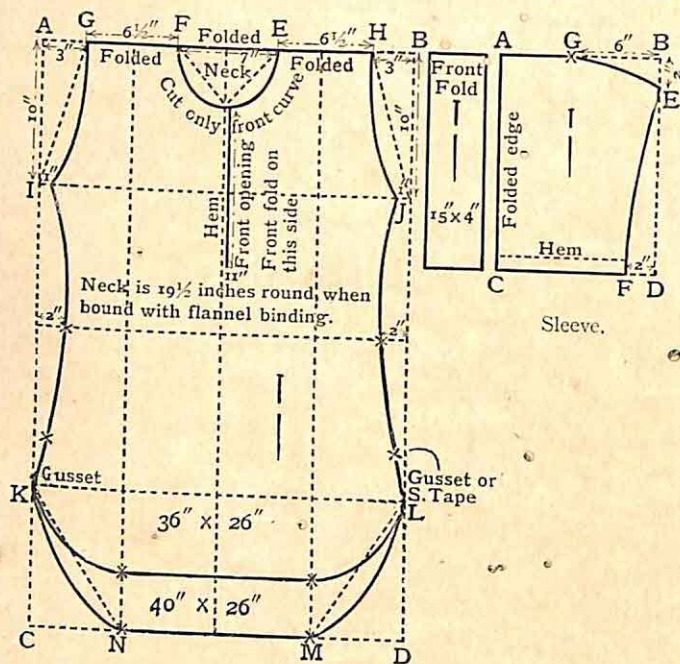


FIG. 251.

a paper pattern, by folding according to the diagram, Fig. 251. In cutting neck curve, only sever the single flannel belonging to the front of shirt, and let this circle remain folded at F E, and then fasten the raw edge by herring-bone stitch to the back part of neck. This makes

a warm pad at the neck, Fig. 252. Cut the front, slit an inch to the left of centre crease. This is made into a hem on right arm side. The left arm side is widened by the front fold. The neck is bound with flannel binding, and so are the edges of the front opening, for strength and firmness. The sleeve is put into armhole by counter-fell fixing, and should not be pleated or gathered in any part. Gussets made of flannel are often too bulky, so the body seams are best protected at the ends by strengthening tapes. The neck is $19\frac{1}{2}$ inches long when bound.

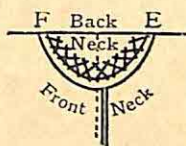


FIG. 252.

CHAPTER VIII

HEIGHTS OF CHILDREN—GIRL'S OUTFIT

AVERAGES

AGE.	FROM HEAD TO GROUND.	FROM SHOULDER TO GROUND.
7 years	42 inches	33 inches
8 to 9 "	49 "	41 "
9 " 10 "	57 "	47 "
10 " 12 "	56 "	48 "
12 " 13 "	$59\frac{1}{2}$ "	52 "
13 " 15 "	61 "	50 "

Note.—The Author is indebted to the Head Teacher of a suburban Girls' Board School for the above average heights of children, from the lowest to the highest classes in the school.

Cost of Outfit for a Girl of Fifteen Years (leaving an Orphanage for Service). By kind permission of the

General Committee of the L. and S. W. Railway Servants' Orphanage, Jeffreys' Road, London, S.W.

UNDERCLOTHING

	£	s.	d.
<div> <div> 3 chemises 3 nightgowns 2 petticoat bodices 3 pairs of drawers </div> <div> 2 dozen yards of Crewd- son's calico, at 4s. per dozen yards; buttons and tape, about 6d. —if flannel, cost is greater by 3s. 4½d. </div> </div>	0	9	6
2 woollen vests at 10¾d. each	0	1	9½
2 flannel petticoats, red flannel or natural colour, 5 yards at 10¾d. per yard	0	4	5¾
2 dark blue serge petticoats—a remnant 3 yards of double width dress serge for 1s. 11d.— home made, and with a little trimming on one at 4½d. for 3 yards	0	2	3½
1 pair corsets at 1s. 11¾d., and 3 pairs of black hose at 1s. 0¾d. per pair	0	5	2
6 yards of towelling at 4¾d. per yard	0	2	4½
	£1	5	7½

N.B.—Most of the underclothing is made in the Orphanage.

OUTER CLOTHING

	£	s.	d.
1 black serge dress, including making and everything	0	9	8
1 black cashmere dress, including making and everything	0	8	8

N.B.—3 yards of double width in each dress; 3s. for making.

	£	s.	d.
2 morning gowns, 6 yards of "Regatta" in each, at 4 $\frac{3}{4}$ d. per yard—linings, buttons and making	0	9	9
1 black cloth jacket	0	6	11 $\frac{1}{2}$
1 mackintosh	0	8	11 $\frac{1}{4}$
1 umbrella at 1s. 11 $\frac{1}{2}$ d., and 1 silk neckerchief at 1s. 4 $\frac{1}{2}$ d.	0	3	4
1 black sailor hat at 1s. 6 $\frac{3}{4}$ d., and 1 black straw, trimmed, at 4s. 6d.	0	6	0 $\frac{3}{4}$
1 pair walking boots at 5s. 11d. ; 2 pair house boots at 2s. 11 $\frac{1}{2}$ d. per pair	0	11	10
6 pocket-handkerchiefs at 1 $\frac{1}{2}$ d. each, 9d. ; four caps at 1s. 5d. ; toilet bags and pins, 9 $\frac{3}{4}$ d.	0	2	11 $\frac{3}{4}$
6 collars and 6 pairs of cuffs, varying in price from 4 $\frac{3}{4}$ d. to 3 $\frac{3}{4}$ d. each, or pair	0	3	9
3 white aprons, home-made, 1s. 6d. ; and 1 best apron, 1s.	0	2	6
6 yards of apron linen at 5 $\frac{3}{4}$ d. per yard	0	2	10 $\frac{1}{2}$
3 yards of Hessian for wrappers at 4 $\frac{3}{4}$ d. per yard	0	1	2 $\frac{1}{4}$
2 pairs of gloves, varying in price	0	1	5 $\frac{1}{2}$
	<hr/> £3 19 11 $\frac{1}{2}$ <hr/>		

MISCELLANEOUS ARTICLES

	£	s.	d.
1 tin trunk	0	5	11
1 hair brush and 1 comb ; other brushes and comb	0	2	4 $\frac{1}{2}$
	<hr/> £0 8 3 $\frac{1}{2}$ <hr/>		
Discount on this bill only	0	0	10 $\frac{1}{2}$
	<hr/> £0 7 5 <hr/>		

SUMMARY

	£	s.	d.
Underclothing	1	5	7 $\frac{1}{4}$
Outer Clothing	3	19	11 $\frac{1}{2}$
Miscellaneous	0	7	5
Total	<u>£5</u>	<u>12</u>	<u>11$\frac{3}{4}$</u>

APPENDIX

NEW CODE, 1901

1. PUBLIC ELEMENTARY DAY SCHOOLS

ARTICLES 115 (a) AND (b). The course of instruction in Infants' Schools and Classes, and for older scholars INCLUDES NEEDLEWORK.

ARTICLE 85 (b), APP. B. "That the course of instruction has been approved by the Inspector on behalf of the Board."

AUTHOR'S NOTE.—Teachers are now able to draw up schemes suitable for the districts in which their schools are located.

2. PUPIL TEACHERS' CODE REMAINS THE SAME

(a) *Exceptions*. A verbal alteration; the word *exercises* being substituted for *garments* in column 11 (a) and footnote *.

(b) Pupil Teachers will not be examined till the "Scholarship" for entrance into a Training College.

3. SECOND YEAR SYLLABUS, 1901-1902

MARKS 100. Half will be given on the Report of H.M. Directress, the other half on result of Examination in July 1902.

A. "Examination paper, testing the practical knowledge of the method to be pursued in teaching needlework to classes of children."

B. "Or, An exercise in cutting-out and fixing the various parts of some garment."

The Second Year Course should include the following:—

- (1) "The higher branches of plain needlework—tucks, whipping, feather-stitch; the repairing of linen, print, and woollen dress materials."
- (2) (a) "Drawing up notes of lessons in needlework, cutting-out,

- and knitting." (b) "The working of sections of garments, and of needlework and knitting exercises in illustration of above-mentioned lessons."
- (3) "The cutting-out in paper of garments suitable for making up by children in the upper standards—the garments to be half-size."
- (4) "The drawing of rough diagrams on the blackboard in illustration of the difficult points in a needlework lesson."

4. FIRST YEAR SYLLABUS, 1901-1902

"Needlework, with special reference to the method of teaching the subject."

N.B.—"Needlework may be dropped at the end of the first year, at the discretion of the College authorities."

First-year students will be required to pass a Government Examination in 1902 or 1903. The Training College authorities are free to formulate a needlework syllabus for one year, or covering the two years of training in a College—1901-1902 and 1902-1903.

DRESSMAKING

There are many systems of Scientific Dress-Cutting and Tailoring. The following are well known in London Board Schools, Polytechnics, Technical, and Evening Continuation Schools:—

1. Mrs. H. Grenfell's, 1s. Macmillan and Co., Limited.
2. The "A B C," by Thomas Hawkins.
3. Miss M. Prince-Browne's, "The Studio," Artillery Mansions, S.W.

APPARATUS

1. **Demonstration Frames.**—These are of two kinds. The "Victoria," which has long been in use, and cannot be folded; and the "New and Improved Stockwell Demonstration Frame," patented by C. M. Hull, an ex-student of Stockwell Training College. This New Frame can be closed and opened, and possesses many admirable advantages over the Original Frame, in that the detached pieces of meshwork can be employed to show the working of stitches upon double material. An additional improvement is a blackboard, which

is fitted into the frame behind the meshwork of tapes. The frame has just been published by Messrs. Cox & Co., of 99-101 New Oxford Street, London, W. The price is 15s. 6d. or 21s.

2. **Paragon Apparatus**, patented by Miss Lambert, an ex-Stockwell student, can also be obtained from Messrs. Cox & Co.

3. A Chequered Blackboard for drawing diagrams to scale is exceedingly useful.

4. A Plain Slate for freehand illustrations.

5. Soft red-lined extension paper ; and chequered paper, as well as sheets of brown paper, are necessary for the cutting-out lessons.



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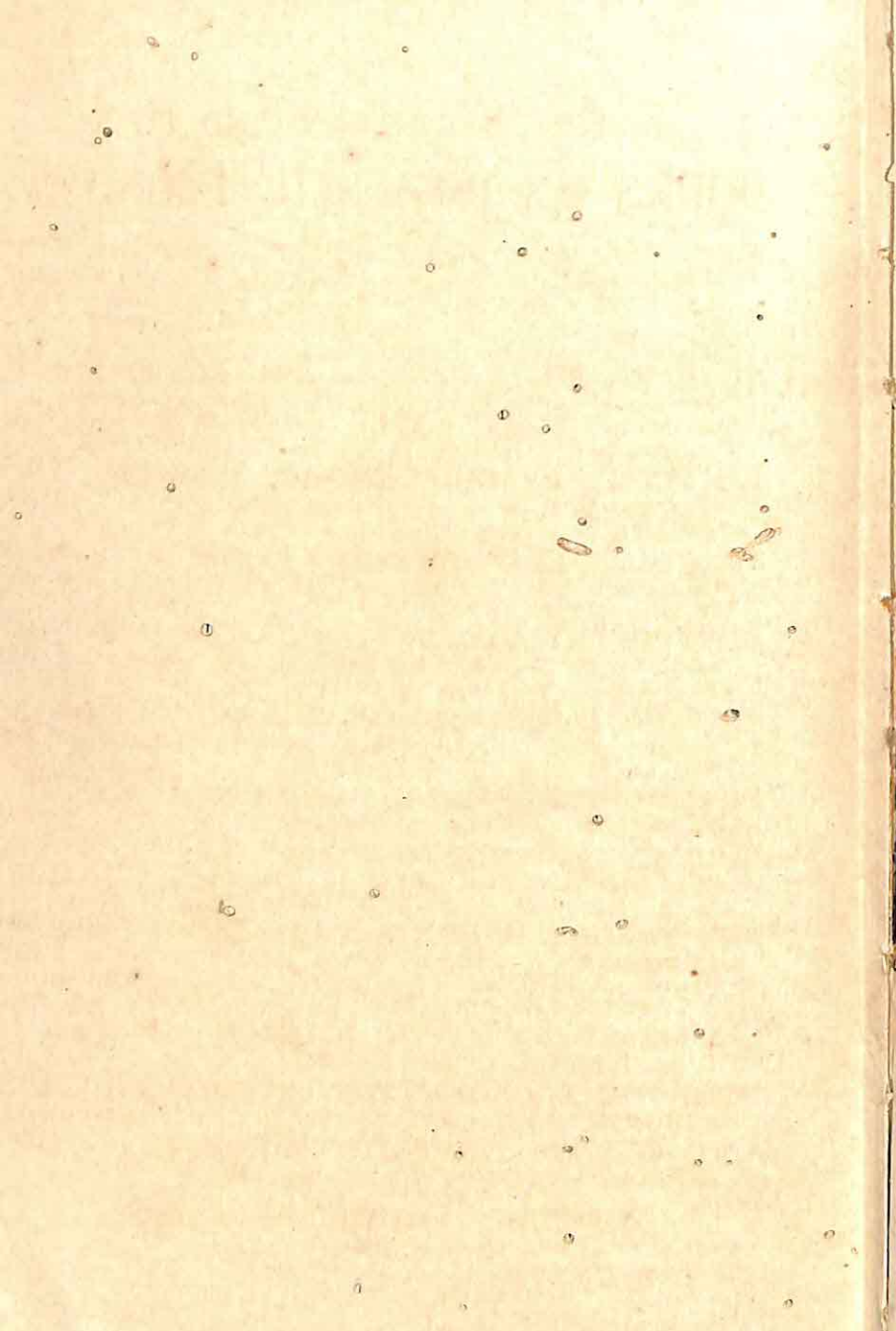
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